

# HARVARD MEDICAL

Alumni Bulletin  
August 1980





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# The New England Journal of Medicine

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# HARVARD MEDICAL

## Alumni Bulletin

August 1980

volume 54 number 5

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**Credits:** p. 4, Brigham and Women's Hospital; pp. 27, 41, Janice Ziemba; pp. 49-50, 52-55, 57-59, 61, Melvin Hookailo; p. 64, courtesy of Margot Green; cover and all remaining photos, Christopher Seiberling.



## Seagram grant: from the bar to the bench

The corporate hand sometimes moves in a mysterious way. At a press conference in late June Harvard president Derek Bok announced what Dean Daniel Tosteson described as a "new expression of the meaning of *vino* and *veritas*": a 5.8 million dollar grant from Joseph E. Seagram & Sons, Inc. for research to be conducted at the Medical School on the fundamental biological, chemical, and genetic aspects of alcohol metabolism and alcoholism. The gift is one of the largest ever made by private industry for basic research; it compares with a total of only nine million dollars spent last year through the National Institutes of Health for the study of alcohol abuse — which cost the United States an estimated fifty billion dollars during that year. The Seagram money will remain in the Bronfman Fund for Medical Studies of Alcoholism, administered by the Samuel Bronfman Foundation, until it is drawn upon according to the needs of the Harvard project. (Edgar Bronfman, chairman and chief executive officer of Seagram, was also present at the news conference.)

Dr. Bert Vallee, Paul C. Cabot Professor of Biological Chemistry at the Medical School, and director of the biophysics laboratory of the Peter Bent Brigham Hospital division of the

Brigham and Women's Hospital, will direct the research. It will be founded upon prior discoveries made by Vallee and his colleagues. They have found that alcohol dehydrogenase, the enzyme in the human liver that first metabolizes alcohol, exists in fifteen similar, but not identical, forms. The type, number, and amount of these isoenzymes vary widely from person to person; any individual can have as few as five or as many as nine, in differing amounts. This genetically determined, idiosyncratic makeup may then determine how someone will react to a given quantity of alcohol.

"At this point," Vallee explained, "we have identified isoenzymes that are quite characteristic of specific population groups, differing from one to the next; the isoenzymes vary characteristically among different racial groups. This can account, as readily as psychobiology or psychosociology, for the individual racial differences" in rates of alcoholism and characteristic reactions to alcohol.

Vallee expressed hope and confidence that with the knowledge and methods now available — and with the help of the Seagram grant — it will be possible to isolate and identify these isoenzymes for study. "With the enzymes in hand," he continued, "one may have the therapeutic potential and the diagnostic means to predict which groups or individuals might be susceptible" to problems that stem from the use and abuse of alcohol.

"The matter of thanol, and ethanol intake is as old as man himself. This is the first time we have had the biological, biochemical, and genetic means to study it, and I think it is reasonable to go about it in a biochemical manner. At least one might find out what the basis of the problems really are."

## Leaders, in veritas

The film and discussion series is called "Leaders in *American Medicine*," but, coincidentally enough, four of this season's five Wednesday afternoon programs at the Francis A. Countway Library of Medicine will be devoted to emeritus members of the Harvard Medical faculty, two of whom are also HMS graduates. (As Dorothy discovered, there's no place like your alma matter.) Arthur T. Hertig '30, Shattuck Professor of Pathological Anatomy, emeritus, and Dwight E. Harken '36, clinical professor of surgery, emeritus, are the Quadrangle homebodies to be featured; Dr. Derek E. Denny-Brown, James Jackson Putnam Professor of Neurology, emeritus, and the late Dr. Grete L. Bibring, clinical professor of psychiatry, emeritus, are the relative newcomers. Dr. Albert B. Sabin, distinguished service professor emeritus of pediatrics, College of Medicine, University of Cincinnati, and distinguished research professor of biomedicine, Medical University of South Carolina, will appear as this year's special guest star.

Harvard Medical School connections (and aspersions of Ptolemaism) aside, these are bona fide "leaders." Denny-Brown emerged out of the 1940s renaissance of neurological medicine as one of the principal role models for a new generation of clinical neurologists. A tri-disciplinarian, Hertig has made important contributions to obstetrics, pathology, and embryology. He described a number of ovarian tumors, atypical changes that occur in the endometrium and lead to cervical cancer, and with Dr. John Rock conducted a classic study of early fertilized ova. Harken, who began his career extracting shrapnel from the hearts of World War II servicemen, was later one of the first to re-



## Home movies, anyone?

The name of this song is, "Make Your Own Kind of Movies," and the Historical Advisory Committee for Harvard Medical School's bicentennial celebration is seeking those who have done precisely that. Miles Shore, Richard Wolfe, and company have issued a call for films and memorabilia of all kinds for possible use in a commemorative documentary, a moving montage of persons and personalities of the school's first two hundred years.

Home movies and professional efforts, Brownie snaps and studio shots, footage of Pavlov at the 1929 Physiological Convention or of your roommate at a 1958 post-exam beer bash in Vanderbilt Hall, visual records of the great doctors, research in



the Quadrangle, the Harvard hospitals, the Thorndike, women at Harvard, Class Day, Alumni Day, the serious and the lighter sides of life on Longwood and beyond: everything will be considered. Older movies and

stills are most coveted by the committee, but more recent material will not be automatically disqualified. (The suggested cut-off date is 1970, but if you have an absolute gem from the decade just past, don't keep it to yourself.)

Anyone who has something (or some things) that might be of use to the committee is asked to write Richard J. Wolfe, Curator of the Harvard Medical Archives, Countway Library of Medicine, 10 Shattuck Street, Boston 02115. Letters should describe the subject matter of the film or photos, and should specify the format — 35, 16, or 8 mm; movie or still — and the approximate vintage. The committee promises that all inquiries will be carefully considered and answered.

lieve mitral stenosis by closed commissurotomy, and he broke critical surgical ground by implanting a caged-ball prosthetic aortic valve and placing the first totally implantable demand pacemaker. Sabin helped develop the vaccine for the control of poliomyelitis, and Bibring, an eminent, immigrant psychoanalyst, was the first woman to become a professor at HMS.

The complete programs are as follows:

■ **Derek Denny-Brown, M.D.** October 8, 1980. Videotaped interview with Denny-Brown, conducted by Joseph M. Foley '41, professor of neurology, Case Western Reserve University School of Medicine. Panelists: Denny-Brown; Foley; and William B. Castle '21, Francis W. Peabody Faculty Professor of Medicine, emeritus, HMS.

■ **Arthur T. Hertig, M.D.** November 12, 1980. Videotaped interview with Hertig, conducted by Stanley Robbins,

M.D., professor of pathology, emeritus, Boston University School of Medicine, staff pathologist at the Peter Bent Brigham Hospital, and visiting professor of pathology, HMS. Panelists: Hertig; Robbins; Guido Majno, professor and chairman, department of pathology, University of Massachusetts Medical School; and Morris Karnovsky, M.B., B.Ch., Shattuck Professor of Pathological Anatomy, HMS.

■ **Dwight E. Harkin, M.D.** February 11, 1981. "Pioneers in Pacing," a videotaped interview by Harkin with Earl Bakken and Barouh Berkovits (produced by Medtronic Corporation for the Bakken Museum). Panelists: Harkin; Francis D. Moore '39, William Oxnard Moseley Professor of Surgery, emeritus, HMS; Laurence B. Ellis '26, clinical professor of medicine, emeritus, HMS; Lewis Dexter '36, professor of medicine at Peter Bent Brigham Hospital, emeritus, HMS.

■ **Albert B. Sabin, M.D.** March 11, 1981. "Albert Sabin: The Making of a Scientist," a videotaped interview of Sabin conducted by Benjamin Felson, M.D., professor emeritus of radiology at the University of Cincinnati Medical School, and Saul Benison, Ph.D., professor of the history of medicine at the College of Arts and Sciences and professor of environmental health, College of Medicine, University of Cincinnati. Panelists: Sabin; Benison; Thomas H. Weller '40, Richard Pearson Strong Professor of Tropical Public Health and chairman of the department, HMS.

■ **Grete Bibring, M.D. (1899-1977)** April 8, 1981. "Conversations with Grete Bibring," a videotaped interview conducted by Oliver Cope '28, professor of surgery, emeritus, HMS. (The tape was originally made for broadcast on "Nova,"; it was obtained from WGBH, Boston.) Panelists: M. Robert Coles, M.D., professor of psy-



chiatry and medical humanities, HMS, and research psychiatrist of the Harvard University Health Services; and Cope.

Refreshments will be served during the half hour preceding the 4:30 p.m. start of each session. The Leaders in American Medicine series is sponsored by Boston University School of Medicine, Benjamin Waterhouse Medical History Society, Boston Medical Library, Brown University Program in Medicine, Harvard Medical School, and Tufts University School of Medicine, under the direction of George E. Gifford, Jr., M.D., associate professor of socio-medical sciences, Boston University School of Medicine, consultant to the historical collections in the Countway Library, and member of the board of trustees, Boston Medical Library. The series is made possible by a grant from the Josiah Macy, Jr. Foundation; each session fulfills the requirements for one and a half hours CME Category 1 credit from the BU School of Medicine.



*In this sketch from a Francis Street perspective, the soon-to-be biosciences research facility looms up behind the existing Microbiology Research Building.*

## Towering research

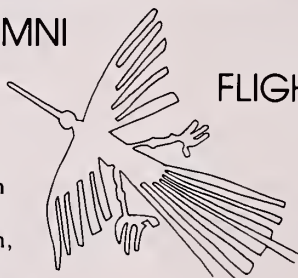
Now that it is a state-certified necessity, a sixteen story tower of academic medical research can begin its ascension into the expanding Medi-

cal Area skyline. Late this year ground between Building B and the surgical building of the Peter Bent Brigham Hospital will be broken for a Brigham and Women's Hospital biosciences research center. The structure will ultimately be joined to the Laboratory for Human Reproduction and Reproductive Biology via a bridge across Shattuck Street.

As a result of national health planning law changes that eliminated a certificate of need exemption for research facilities, the Brigham and Women's had to go through the determination process before receiving permission to proceed. The hospital's application was the first to be approved under the new regulations. According to the current plan, the top three floors of the building will be allocated to the Howard Hughes Medical Institute for research in genetics, immunology, endocrinology, and metabolism. The lower twelve will house present and future Brigham and Women's laboratory investigations in pathology, medicine, general surgery, orthopedic surgery, anesthesia, radiology, immunology, and biophysics, as well as provide new space for laboratory animals. Dr. William E. Hassan, the hospital's executive vice president, has predicted an additional, short-term benefit: two hundred jobs during the two years scheduled for construction of the building.

Two departments have secured special funding to underwrite their

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operations in the research center. The Burroughs Wellcome Fund has given \$450,000 to relocate and equip what will be known as the Wellcome Laboratories for Transplantation Biology. The grant honors the work of two pioneers in tissue transplantation, Drs. George Hitchings and Joseph Murray. The urology laboratories will receive similar support from the Pew Memorial Trust, which has promised \$500,000 for facilities that will bear the name of Dr. J. Hartwell Harrison, former chairman of the Peter Bent Brigham department of urology. Harrison and Murray were both members of the Brigham team that performed the first successful human kidney transplantation in 1954.

## Match points: Internships & Residencies 1980

### Massachusetts General Hospital

John Berry: surgery  
Barbara E. Bierer: medicine  
Karen J. Carlson: int. medicine/  
primary care  
Gilbert Chu: medicine  
Richard J. Comi: medicine  
Samuel D. Gerber: surgery  
Ann M. Hawryluk: pediatrics  
Steven E. Hyman: medicine  
Paul C. Kuo: surgery  
Dennis P. Lund: surgery  
Andrew R. Marks: medicine  
Michelle A. Petri: medicine  
Samuel L. Stanley: medicine  
Richard S. Swanson: surgery  
Isidore Tepler: medicine  
Ellen K. Williams: int. medicine/  
primary care

### Beth Israel Hospital

Marlene J. Beggelman: medicine  
Michael A. Bookman: medicine  
Pamela A. Chevers: surgery  
Alice M. Cort: medicine  
Sheila D. Davis: medicine  
Greer L. Geiger: medicine  
Marcia A. Gonzalez: surgery  
Jacob M. Joffe: medicine  
William J. Plaus: surgery  
Bartholomew J. Tortella: surgery

### Brigham and Women's Hospital

John R. Adler: surgery  
Sharon S. Bushnell: surgery  
Mark A. Keroack: medicine  
Carol Martini-Fitzgerald: ob/gyn  
Thomas P. Rocco: medicine  
Jeffrey E. Sell: surgery  
Sandra L. Skettino: medicine  
Judah Z. Weinberger: medicine  
Joanne M. Wilkinson: medicine

### Moffitt Hospital, San Francisco

Hilda H. Anderson: medicine  
Griffith R. Harsh: neurological surgery  
Steven S. Jacobs: int. medicine/  
primary care  
Betty Lee: ob/gyn  
James R. Macho: surgery  
Charles A. Simonton: medicine  
John D. Warbritton: orthopedic surgery

### Johns Hopkins Hospital

Maria C. Alexander-Bridges: medicine  
Julia A. Haller: surgery  
Robert L. Redner: medicine  
Hilary C. Siebens: medicine  
Michael T. Watkins: surgery  
Andrea L. Zuckerman: pediatrics

### Univ. of California Hospital, Los Angeles

Linda M. Lyons: int. medicine/primary care  
Bruce E. Rolston: surgery  
Wesley Rosario-Medina: pediatrics  
Peter G. Spitzer: ob/gyn  
Robert A. Wolf: medicine  
Carol L. Zinar: int. medicine/ primary care

### Presbyterian Hospital, New York

Carlton C. McGregor: medicine  
Jacques P. Merab: medicine  
Nancy Oliva: ob/gyn  
Nancy Q. Petersmeyer: pediatrics  
Sheri Slezak: surgery

### Stanford University

Richard J. Bloom: surgery  
Sharon A. Clark: plastic surgery  
Alan K. Louie: medicine  
Stanley W. Perkins: surgery  
Joan M. Turner: medicine

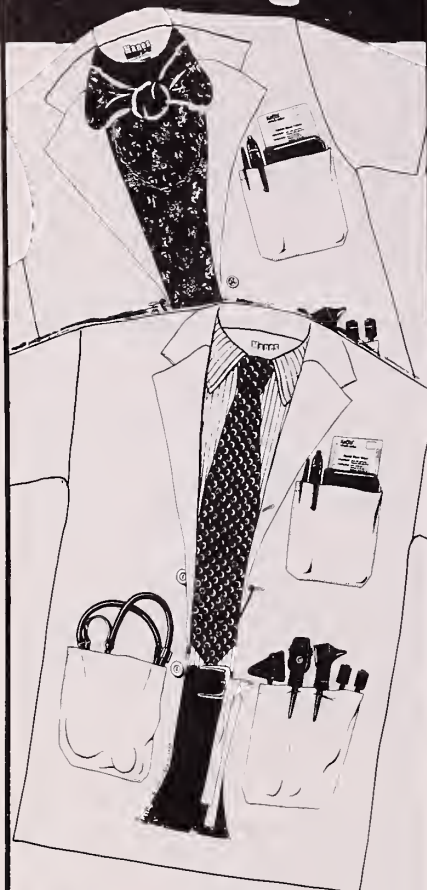
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Mark L. Silen: surgery





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 Melinda Wharton: medicine

#### Univ. of Rochester Assoc. Hospitals

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 Leslye R. Heilig: pediatrics

#### VA/Wadsworth Hospital, Los Angeles

Andrew I. Caster: medicine  
 Edward A. Elliott: medicine

#### Bronx Municipal Hospital Center

Jeremiah J. Levine: pediatrics

#### Cedars-Sinai Medical Center, Los Angeles

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#### Children's Hospital, Washington, D.C.

Ernest L. Carter: pediatrics

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#### Highland Hospital, Rochester

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#### Jewish Hospital, St. Louis

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Perry R. Karfunkel: medicine

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Kelley J. White: pediatrics

#### St. Mary's Hospital, Madison, Wisc.

Michael C. Holt: family practice

#### Santa Clara Valley Center, San Jose

David F. Chang: flexible





**Strong Memorial Hospital, Rochester**  
John A. Foster: medicine

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Patricia A. Walicke: psychiatry/medicine

**University Hospital, Zurich**  
Gustave von Schulthess: medicine

**Univ. of California Affiliated Hospital, Davis**  
Michelle Petrofes: family practice

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Andrew M. Kramer: family practice

**Univ. of Massachusetts Medical Center**  
Annmarie Errichetti: family practice

**Univ. of Texas Health Science Center**  
David E. Arredondo: family practice/psychiatry

**Univ. of Texas SW Affiliated Hospitals**  
Michael C. Scally: surgery

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# ALUMNI DAY 1980

At the eighty-sixth annual meeting of the Harvard Medical School, the prosaic mixed well with the evocative. In the usual manner, the transfer of power occurred: Gordon Donaldson '35, current president of the alumni association, handed over the ceremonial gavel of his office to his successor, Eben Alexander '39. But while the presidency was still his, Donaldson appealed to the receptive mood of the alumni/ae seated before him. "As I have said before, students come and go — most of them in four years — and the faculty also fades away, even those with tenure. But the alumni/ae go on forever and supply their supportive continuum, which makes this School great. The name of the game is involvement and a sense of belonging."

Alumni Day, however, is not made of sentiment only. Donaldson reported on a year that had been busy for the Alumni Council with "the completion of some projects and identification of others." He enumerated a few of those:

- The unanimous advocacy of a return to a system of grades and a reactivation of the Harvard chapter of Alpha Omega Alpha.
- The approval of the Faculty Council for the appointment (subject to the consent of the dean) of nonfaculty alumni/ae to the admission, curriculum, education evaluation, continuing education, and library committees.
- Support for the establishment of a common living quarters in the medical area for married students and their families. "We believe the HMS experi-



*That presidential manner: Through June 1981 Eben Alexander '39 addresses his fellow HMSers as the president of the alumni association.*

ence would have more meaning, be more gratifying, and engender more loyalty if personal and social contacts, as well as intellectual ties, were kept close," observed Donaldson.

□ The approval of a free-standing, revolving alumni/ae scholarship loan fund to be awarded to one or more students in recognition of superior scholarly achievement. \$50,000 is necessary to initiate this unique fund, which, Donaldson noted, will be replenished by those who reap its benefits.

□ Presentation of a report on "the

premedical syndrome," researched and prepared in large part by Carl Aikens '66 and Peter Ahrens '41 and the other members of the Alumni Survey Committee. Its title: "The Need to Consider Modification in the Premedical Education and Selection of Applicants to the Harvard Medical School."

\* \* \* \*

They did it their way. Not content with the usual twenty-fifth reunion gift of sixteen or so thousand dollars, the Class of 1955 decided to do more. They were ambitious — some might have thought foolhardy — when they proposed a Class of 1955 Fund, with a pricetag of \$50,000. The income from the endowment would support medical student research, from primary care to basic science. As Roman DeSanctis, class president and with Mitchell Rabkin co-chairman of the reunion committee, remarked, "the clinical researcher is a vanishing breed."

Would the instincts of DeSanctis and Rabkin be proven right or would their unique idea for a Class of 1955 Fund be rejected?

When Roman DeSanctis announced the results at the annual meeting he knew that his class had made some HMS history, and that there was no need to be modest about it. "Many physicians are not at the poverty level at twenty-five years out. Our class this year resolved that we would get a greater total if we possibly could, and we wanted to do something particularly to try to let our students know that the alumni care. The response from the class has been tre-



mendous. Fifty-five of 128 classmates have given gifts in excess of \$500, and several have been in excess of \$1000."

Through the power of suggestion — "with absolutely no arm twisting," according to DeSanctis — additional benefactors of this noble enterprise came forward. He seized upon the annual Christmas gift-giving ritual as an opportunity to stimulate goodwill toward the Class of 1955 Fund, and received another \$7000 in patient gifts.

The class met its \$50,000 goal, and reached a five year total of \$91,000 one month before the end of fiscal 1980. Being first certainly has sweet rewards, but HMS 1955 will gladly be replaced. "It is our hope and expectation," concluded DeSanctis, "that every twenty-fifth reunion class will do better than we did."

\* \* \* \*

**I**t was a good showing for all of the 5s and 0s. Five year totals within each class added up to: \$50,000, 1925; \$30,000, 1930; \$31,000, 1935; \$140,000, 1940; \$38,000, 1945; \$27,000, 1950; \$91,000, 1955; \$41,000, 1960; \$23,000, 1965; \$16,000, 1970; and \$4,000, 1975. The grand total of this year's reunion numbers game: \$491,000.

After lauding these sums, Carl Walter, factotum of the alumni fund, went on to critique the overall performance during fiscal 1980. Although \$1,751,618 — raised by contributions from 3,862 alumni and non-alumni alike — is not a paltry sum by anyone's calculator, Walter was concerned because the fund had experienced "a few gyrations." He was referring to a loss from last year's rolls of some 800 HMS benefactors. Should these former loyalists find their way back to the alumni fund, the volume of contributions should rise accordingly and the bottom line should need no apology next year.

\* \* \* \*

**R**ing out the old. Ring in the new. That's how it is on Alumni Day for those alumnae who are elected to three year terms on the Alumni Council. Out of 2,337 ballots, winning votes were cast for: Bradford Cannon '33, president-elect; Joseph S. Barr '60, vice president; and councillors Stephanie H. Pincus '68, Clement A. Hiebert '51, and Albert Mendelhoff '42. Simultaneously, terms of service



*Once a dean, always a dean: Alumni Day was a day for emeritus deans, with both George Packard Berry, above (1949-1965) and Robert H. Ebert (1965-1977) bearing the title. Barbara Ford, who has been a mainstay in the dean's office since 1959, made the rounds with her former bosses.*

ended for: Jane G. Schaller '60, vice president; and councillors Edwin H. Cassem '66, Larry G. Siedl '61 and T. Franklin Williams '50. And the offspring of the Council, the Alumni Survey Committee, gained three new appointees: Renee L. Gelman '50, Glen R. Leymaster '42, and David E. Marcello '56.

\* \* \* \*

**N**o sooner are the speeches roundly applauded and the tents in the Quadrangle dismantled than the momentum starts up anew. The next set of reunion classes gets organized, questionnaires that document professional stature and philosophical

reflections are compiled, rooms are booked at favorite seaside resorts. As that phase of the cycle nears completion, attention shifts to Alumni Day itself. The twenty-fifth reunion class is always the toast of the program and the toastmaster for the Class of 1955 was Mitchell Rabkin. His introductions were brief, yet full of admiration, and blended well with his own sentiments on the meaning of all of this fanfare. "One of the pleasures of reunion is the opportunity to survey the careers of classmates. To savor their diversity of interests and achievements and to review how clearly predictions from the early days bear out with the passage of time." □

# (FROM HMS) TO THE DESERT AND BACK

*A self-styled stranger looks homeward*

by John E. Mack

*Apparently John E. Mack '55 was the object of some speculation during medical school. Was he, as Mitchell Rabkin put it, "simply a dreamer, or someone who would reach important heights by his soaring imagination?" In light of his professional accomplishments, John Mack has been anything but idle. He is currently professor of psychiatry at Cambridge Hospital, where he was chief of that service, and is senior staff psychiatrist at the Cambridge-Somerville Mental Health and Retardation Center. Dr. Mack won the Pulitzer Prize in 1976 for his study of T. E. Lawrence, A Prince of Our Disorder.*

I want to make a confession. I have always felt that I was at Harvard Medical School under false pretenses. Some of you may remember the interview you had with Reginald Fitz, the assistant dean of the Faculty of Medicine, who was responsible for admissions and student affairs. As part of the preparation for this awesome experience I received advice from several HMS graduates, including a couple of relatives I much respected, who told me not to say anything about wanting to help people, let alone to mention an interest in psychiatry or psychology, but to convey rather a single-minded passion for the biological sciences. This I believe I must have done. When applying for internship in the Boston area my fellow students gave me similar advice, although as it turned out our chief of medicine at the MGH, Walter Bauer, whom I came to love and revere, was a superb psychologist.

In the years that followed residency, except for two years in the Air Force in Japan, I have remained within the Harvard Medical School faculty. I have always been pursued by the feeling of not quite belonging, of being, in Georg Simmel's sense, a stranger.

Simmel was a German sociologist of the late nineteenth century. His stranger was a kind of outsider who does not come today and go tomorrow, but comes today and stays tomorrow. He confronts the group but is not totally part of it. He participates and *is* a member, but largely insofar as he imports certain qualities which create the common bond. The position of the stranger permits him a certain objectivity to which others may respond with a surprising openness — a phenomenon especially familiar to psychiatrists and psychoanalysts.

Perhaps the choice of borderlands in which to travel — or borderlines with whom to work — has something to do with this notion. Certainly my seeking out of Bedouin tribesmen in the Jordanian desert in order to learn about an Anglo-Irish troublemaker who was himself a bit of an odd one, seemed to stretch even Simmel's concept.

Relatives and old friends asked what running around among all those Arabs had to do with being a doctor, especially a Jewish doctor. I know now, with that sense of order which only a retrospective view can provide, that for me T. E. Lawrence was the ultimate stranger, a wounded soul who moved among an alien race, seeking to repair his personal injury while enabling another people to fulfill their national dreams. Later, while trying to bring some sort of psychological understanding to the Arab-Israeli conflict, I came to realize that I had been embarked in Jordan on a private mission, seeking to answer questions about my own identity as a physician and a person.

Even in Cambridge, where for fifteen years I have worked toward the development of a primary care health system and a department of psychiatry in a municipal hospital and community mental health center, I have felt on the fringe. Cambridge, although the Center of the Universe for hundreds of thousands of intellectuals, students, and political leaders, remains a border area for Harvard Medical School.

But now I can reexamine this whole matter of the outsider's identity from the vantage point of hindsight. The first hint that there was something amiss in my thinking, or at least that I was not alone in my experience, came at a promotions and appointments committee meeting about a year ago. For those who are not familiar with it, this is a Medical School committee that passes upon the qualifications of faculty members at the assistant and associate professor ranks. As a psychiatrist, dealing largely with broader clinical and social problems, I had rather enjoyed reviewing the work of scientists in various specialties, flattering myself that I could in some small way keep up thereby with what was going on in other branches of medicine. It fell to my lot to review for one meeting the proposal for promotion of a young biochemist to associate professor. The person's work seemed to involve the





morphology and properties of a particular enzyme, but after reviewing the supporting letters and taking a crack at a few of the reprints, I had to admit to myself and, ultimately, to the committee, that I could not make head or tail of it. I looked, expectantly, to the chairman of the department which had made the proposal, to explain the significance of the research. To my surprise, however, he looked uneasy and a little flustered and could say little more than that the work was "methodologically very rigorous." It was then that I began to suspect that in this age of super specialization this chairman and I were in rather the same boat. The candidate was, of course, promoted.

After this I felt inspired to reexamine with an open mind some of my previous assumptions. The twenty-fifth reunion report of our class has proven to be a particularly rich source of data. The 107 members who responded reflect 2,675 years of experience and there is much wisdom contained in its pages. There is also a candor, a tendency toward self-revelation, which was not present to the same degree in the tenth or twentieth reunion reports, due perhaps to the fact that there is no longer any use pretending that we are something, or are going someplace, we are not. As one respondent noted, the Ptolemaic view of the universe to be had from Harvard is demonstrated in the phrasing of one of the questions we posed to ourselves: "What would you like to tell your classmates of your quarter century of living?" — as if there had been no life before HMS.

I would like to share with you some of what is in this report, and add a few associations to it. The thoughts of classmates have helped me to bring into a fresh perspective what lies at the heart of being a physician, and to appreciate in a new way what HMS, as the place where this was first defined, has meant to me.

A somewhat subjective sociological analysis of the responses yielded a number of interesting facts and impressions. In spite of the personal tragedies revealed, and the generally poor state of the world, for the most part the tone is upbeat. A great many of the members of this unliberated class write enthusiastically of their lives, are excited about what they are doing, and, if they had it to do over, would not change much. There is very little cynicism. The extra-

ordinary range of professional creativity is not unexpected, but the variety of other activities and interests was startling. Some of us are left of center politically, but all seem fiercely conservative in holding out for the protection of individual freedom in the face of growing government bureaucracies and strangling regulatory systems. The technology which has so profoundly affected the way each of us practices is generally more feared than valued. As a reaction perhaps against the encroachment of institutions upon our lives, there is evidence of a nostalgia for nature if not a return to it. In addition to the many gardeners, backpackers, and hikers, we have two cattle ranchers and several who are spending enough time cutting and splitting firewood to write about it. We are a class of travelers to foreign lands. And the female members of the class seem not to have been affected very much by the women's movement. They write unabashedly of the pleasure of having babies, of raising a family, and of serving others, including their husbands. One HMS '55 allowed her husband, also a classmate, to submit her response for her.

Coming closer to my theme, I found that the report was filled with images of seeking, of searching, and with the evidence of successful personal efforts to grow. It seemed that those who had undergone intense disappointments were especially willing to reveal the pains of self-discovery and the struggles that accompany change. I discovered that my classmates, like myself, had always wrestled with the question of identity, and were continuing to define for themselves the values and ideals which were central to their lives as physicians. One of us wrote, "I am not big on this roots stuff," but he, like many others, sought to define what he valued most in his personal and professional life. The word "wrestle" recurred, as if we were a little like Jacob wrestling with the man sent to him by God, his own spirit or demon, in order to find that he was Israel, his true identity and destiny.

A deep gratitude toward Harvard Medical School, an unequivocal feeling of being privileged and lucky to have gone here, is felt by most if not all of us. As several wrote in the report, HMS has provided many opportunities and given us a kind of security. If nothing else, as one put it, "Harvard teaches you not to go through life bumping into



furniture." Many developed at HMS a lifelong excitement about scientific investigation and discovery, although several lament that administrative chores have taken them away from direct participation in laboratory research.

But there is something more basic that must have been learned here, which is never seen as incompatible with Harvard's commitment to scientific and intellectual excellence. Of the 107 members of our class who responded to the questionnaire all but nine are engaged in some type of practice in a medical specialty, either full time or in combination with teaching, research, and administration. Furthermore, there is expressed over and over in these pages a deep and sometimes growing pleasure in patient care, in the value of giving, and at times bitter resentment toward the political and institutional forces that would separate the doctor from the patient or destroy the patient's confidence in us. Whether the locus is the private office, an innovative medical care plan, or the broader community, the common quality is caring for others, the assumption of responsibility, or what one of us called nurturing. After twenty-five

years another of our distinguished classmates gave as his principal piece of advice, "always get the patient's name straight."

I have ultimately come to understand the notion of the stranger in a different way. Each of us, I expect, has had our own desert in which to journey. As physicians I believe we are all strangers, but less to each other or to the Medical School community. We are strangers more among the group we serve. Our profession allows us the prerogative of a special closeness to our patients, their families, and communities, but it is a closeness, a physical or emotional involvement, which is limited, circumscribed by the responsibilities and functions which we are mandated to undertake. In other respects we remain apart, among them yet not among them, near yet far. It is this fact, I believe, that paradoxically makes the practice of medicine so lonely.

But we are not in this sense strangers to one another. Our common experiences and dedication create a bond among us, join us organically to each other. This, for me, is the meaning of reunion. □



# THE WAY OF ST. JAMES — A DISTANT MIRROR

*The progress of a latter-day pilgrim, many miles  
and several centuries into the past*

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by J. Gordon Scannell

*J. Gordon Scannell '40 has figured prominently in the use of therapeutic surgical advances for problems of the thorax. "If Churchill and Sweet stormed the bastions of the thorax," quipped Dr. Rabkin, "Scannell secured these positions and made way for those in our class and subsequent ones." Dr. Scannell is clinical professor of surgery and in charge of the surgical clinical clerkships at the Massachusetts General Hospital, where he is senior surgeon.*

It goes without saying that I am flattered to be asked to say something — *anything*, I recall, is the way it was put to me — at these festival rites. With this open invitation I have chosen to talk about a pilgrimage — the Road to Santiago or, in its anglicized form, the Way of St. James. An odd thing to talk about, you may say. An unwritten page in Barbara Tuchman's *A Distant Mirror*, this pilgrimage was a fact of the middle ages. Each year throughout and since those dimly-lighted times hundreds of thousands of pilgrims — the mighty and the humble, prince and prelate, pious and rascal, the Wife of Bath, and even your speaker — have traveled across France, the Pyrenees, and along the northern tier of Spain to the great cathedral and shrine of Santiago de Compostella in Galicia in the very northwest part of Spain.

Three years ago Helen and I, finding ourselves in northern Spain, and influenced, no doubt, by the engaging tales of Michener, made one of the most rewarding of journeys, our own informal and fragmentary version of the pilgrimage to Santiago — the Way of St. James. It was an exciting experience and when we had done we were not certain in what century we were or in fact whether we might not be part of some Romanesque capital, preserved forever in stone.

We live in a quantitative age, and yet at the same time we encourage students, or, rather, they insist that *we* think hard about the quality of life. Now there is nothing more qualitative than a pilgrimage, whether it be to Mecca or, for many of us, to this Quadrangle. The reasons for embarking on a pilgrimage are many. We usually know what we are trying to flee. It is not always clear what it is that we seek. Perhaps it is true that as we grow older, with the graying of America, we tend to embark upon hidden journeys that

will remind us gently of the ultimate one — a cheerful thought from Starkie's *Road to Santiago*, certainly calculated to cast a damper on party.

I prefer to think of pilgrimages in the words of Rat, even though he was talking about boats. "In or out of 'em, it doesn't matter, nothing really seems to matter, that's the charm of it. Whether you get away or whether you don't, whether you arrive at your destination or whether you reach somewhere else or whether you never get anywhere at all, you are always busy and you never do anything in particular. And when you have done it there is always something else to do, and you can do it if you like, but you had better not."

A thousand years ago, towards the close of the first Christian millenium, Western Europe feared greatly that the end of the world was at hand. It was also under intense pressure from Islam, which had spread westward like a tidal wave through the Iberian Peninsula, with a rivulet or two flowing past the Pyrenees. Now here we are, nearing the end of the second millenium, and there is certainly uneasy talk about the enduring qualities of our world and we, too, feel the pressure of Islam.

A thousand years ago, give or take a century, the cult of St. James took life. St. James, the patron saint of Spain, traditionally a teacher and follower, became identified with the flaming sword and white charger. "Santiago Matamoros" single-handedly slew sixty thousand Moors at the legendary battle of Clavijo — a remarkable statistical feat, even for a legendary battle. The story of St. James is a classic of the dark and middle ages: some facts, more tradition, countless legends, and a world of ecclesiastical politics that we find difficult to understand.

There is also a bit of history which, as you well know, "is not what you thought, it is what you can remember. All other history defeats itself." St. James almost certainly did reach Spain in his apostolic role, then returned to Jerusalem and martyrdom — beheaded by King Herod, himself soon to be banished to southern France. So much for the facts.

According to tradition the head and body of St. James were carried in a stone boat from Jaffa, through the Mediterranean, and out through the Straits to come ashore at Padron, just south of the present Cape Finisterre, the end



of the earth. The navigational details of this remarkable voyage are suitably obscure, but the end of the voyage was dramatized by the appearance of a horseman following along the shore. He rode out on the water toward the approaching vessel but did not remain waterborne long. It was only through the good offices of the Saint that he surfaced, covered with the cockle shells that abound in these waters.

In the years ahead the cockle shell was to become the badge and passport of the pilgrim bound for Santiago. You are familiar with it, no doubt, as the shell filled with scallops in a white wine sauce — *Coquille St. Jacques* — a tasty medieval dish, a favorite along the pilgrim road. This road began in Paris, though there were other starting points, and spread by various routes through central France to focus again at Roncevalles or at Sarnport and so cross the Pyrenees, that formidable wall which has always set Spain apart from western Europe. The ancient road then passed through the Basque country and along the northern edge of Spain.

But to return to the relics of St. James. These were buried with historic confusion in the region of the present Santiago and there slept undisturbed for eight hundred years while the Moors consolidated their power and in Cordoba, a center second only to Mecca, built the largest and most beautiful building in Islam. It was said to contain the arm of the Prophet.

Meanwhile, in Asturias and Galicia, the refugees of Gothic, Roman, Celtic, Basque, and Iberian stock were gathered with their backs to the wall. This was the time of Charlemagne and his ill-fated retreat through Roncevalles — the subject of the *Chanson de Roland*, later to become a constant source of inspiration, information, and entertainment to the pilgrims. Just prior to this, at a most opportune moment, the relics of St. James had been discovered by a godly hermit, who was led to them by a star brightly burning over a thickly wooded hillside. To this place the name "*Campus-stellae*" was attached to perpetuate the miracle of its discovery. Scholars will argue the point, since it also happens to have been a Roman place of interment — *compostum*. With the body of the Apostle versus the arm of the Prophet, the makings of a holy war were at hand. Suffice it to say that Santiago became the patron saint of the Spanish

kingdoms, with his frequent and timely apparitions, and the rallying cry of countless, even to the Conquistadores of the New World. Fact, tradition, and legend conspired to lead hundreds of thousands each year to this spot where the relics are, are said, or are believed to be.

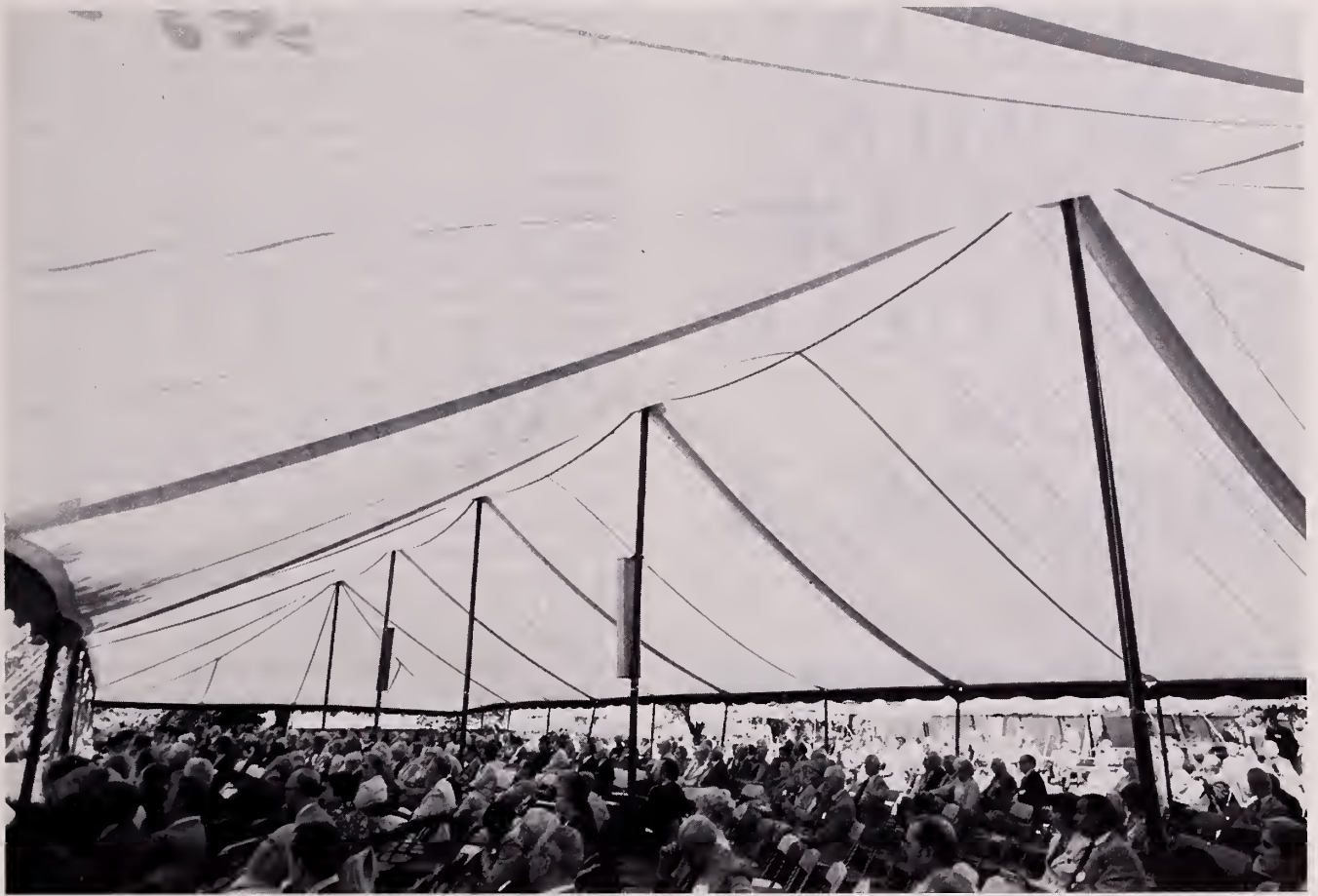
The early pilgrims were mostly penitents — for the reforms of the Benedictine Abbey of Cluny, which dominated the middle ages, filled the people of the West with gloom and apprehension. By the twelfth century, Cluny had built its abbeys and hospices along the Jacobean Road, peopled them with French clerics and produced under the hand of Aymery Picaud, the first Michelin guide. As global anxiety lessened, the way of St. James became, among other things, a minstrel journey that followed the Romanesque architecture and the Gregorian music of the clerics of Cluny.

We picked up the pilgrim way at Jaca, in Aragon, with its ancient bridges and nearly medieval towns and chapels. Nearby is San Juan de la Peña, a ninth century monastic church hidden from the invaders, tucked into a cliff much like the cliff dwellings of our own southwest, and probably their contemporary. According to local tradition the monks there were guardians of the Holy Grail before it was moved to Valencia. In the cloisters we were introduced to those marvelous down-to-earth Romanesque capitals, living records in stone of the quality of medieval life designed to instruct the pilgrim with episodes of the scripture story, the joys of the blessed, and the torments of the damned. The entire Jacobean way is a treasury of the Romanesque. If you make this journey, you will come at last to one of its finest expressions in the Portico de la Gloria of the Cathedral in Santiago.

It is hard to believe, but almost certainly true, that during the middle ages, three to five hundred thousand a year would make the pilgrimage to Santiago — some as penitents, some for spiritual favors granted or sought, some out of thanksgiving, some under court order to make the pilgrimage "or else," many for prestige, others for profit, many for adventure — but few for their health.

I cannot even begin to enumerate the historic significance and the ramifications of this scene. But I have been in the cathedral when the effigy of the head of the Apostle was carried in solemn procession to the high altar,





while the enormous censer — “el botafumiero” — the size of a Volkswagen, suspended from the roof of the transept, swung back and forth issuing great clouds of incense from brightly burning coals — and the little people, the small aged and ageless women of Spain, dressed in black, crept out to touch the archbishop’s gown. In what century was I?

If you would like the answer to that question, I can recommend Michener’s *Iberia* as one of the most readable and available accounts of the pilgrim way. There is also a superb account by Edwin Mullins who about ten years ago produced a documentary for the BBC on this subject. He writes:

“The Romantics turned to the Middle Ages to indulge their dreams. Do we still? To say that St. James has been the stuff of dreams for more than a millenium is true enough; bad dreams, sentimental dreams, dreams of revenge, of salvation, of wealth, even dreams of truth. And yet how amazing and ironical it is that this legend, so improbable, so flawed, [at times] so disreputable, should have trodden the path through the history of western Europe that is flagged by some of the brightest achievements of our civilization.”

Should you ever make your way to Santiago you will find at the end of your journey not only an enormous cathedral and a charming university city, but also one of the most magnificent hotels of Europe — the Hotel de los Reyes Catholicos, until 1956 a Royal Hospital, founded by a royal grant from Ferdinand and Isabella in, of all years, 1492. The magnificent structure, based on four courtyards, was finished in 1511. Many of those who survived the pilgrim-

age were in desperate need of whatever care was to be had. In 1550, for example, at any given time three large wards would be filled with more than two hundred sick. In the early years of this century the Royal Hospital was closely tied to the University of Santiago and its medical school. It was, you might say, the affiliated medical center and general hospital for northwest Spain.

One more thought and I have done. Sometime of a clear night, as you gaze upward to the Milky Way stretching from east to west across the sky, remember its ancient name, “The Way of St. James.” For this was the guide that led the ancient pilgrims to Santiago. And if you get yourself in the right frame of mind — a little Rioja may help — you may find yourself back in God knows what century, hearing the tales and songs of the minstrels and jongleurs of that time. □

#### Selected References

- Hartley, C. G. (Mrs. Walter Gallichen). *Mediaeval Towns, The Story of Santiago*. London: J. M. Dent, 1912.
- Michener, James A. *Iberia*. New York: Random House, 1968.
- Mullins, Edwin B. *The Pilgrimage to Santiago*. New York: Taplinger, 1974.
- Salter, Cedric. *Northern Spain*. London: B. T. Batsford, 1975.
- Starkie, Walter. *The Road to Santiago*. London: John Murray, 1957. (Also Berkeley: University of California Press, 1965).

# WHAT DO WOMEN WANT, OR THE COUCH IN BUILDING A

*Medicine is their business*



by Ann B. Barnett

*In the middle of a rewarding career doing clinical research in neurophysiology and the electrical activity of the brain, Ann B. Barnett '55 decided to return to her first, unrequited medical love — clinical pediatrics. She dove in the deep end and became a first year resident, an experience she describes as "extraordinarily demanding, humbling, exhausting, and exhilarating." Dr. Barnett is a full-time staff physician in the departments of neurology and child health and development at Children's Hospital National Medical Center and associate professor at George Washington University School of Medicine and Health Sciences.*

**“W**hat do women want?” was Sigmund Freud’s famous question. It is also a question I have met in one form or another a number of times over the years since medical school. I thought it would be of interest to consider it today, twenty-five years later.

One of the people whom I most vividly remember posing that question to me during medical school was Dr. Samuel Levine, an esteemed teacher of cardiology to several generations of Harvard physicians. It was at a social gathering. (Dr. Levine and my husband’s parents were acquaintances.) Dr. Levine pointed to the callus on the knuckle of his third finger and explained that it had been caused by the impact from thousands of palpations during chest examinations. “You’ll never get a callus . . .” he announced to me. I waited apprehensively for him to criticize my faulty technique in physical examination. “Because it takes years,” he continued, and went on to say that those were years no woman, especially a married woman, could or should put in. (He was right about the callus, but I do have other scars.)

I tell this little story because I think it can be used as a marker of the progress of women at this institution. I would guess that most members of the medical faculty here now believe that medicine is an appropriate career for women. In most schools in the United States women now comprise from a quarter to a third of each class. In my hospital, the Children’s Hospital National Medical Center in Washington, D.C., last year marked the first time that over half of the first year residents were women. I think there is also a greater understanding of the sex stereotyping at home and in the early school years that has discouraged girls from excelling in science and math. This realization will probably be translated into programs that will produce a larger number of women who are better prepared for careers in science and medicine.

But, progress or no, discrimination is still a matter for concern. As I was getting on the plane to come to Boston, I saw an article in the *Washington Post* with the headline: “Two Surveys of Women Report Widespread Sexism at Harvard.” A few paragraphs from that article read:

“CAMBRIDGE, June 3 — Sex discrimination, often subtle and unintentional, remains a formidable barrier to the academic careers of women here at one of the nation’s most elite universities, according to politically diverse student groups at Harvard and Radcliffe . . .

“The survey by the Women’s Studies Coalition states that ninety-one percent of women graduate students attending Harvard for five to ten years experience sex dis-



crimination, with the highest percentage, ninety-five percent, reported at the medical school. Nearly half the respondents, representing eleven percent of women graduate students, say they were aware of incidents of sexism after only one year. The Radcliffe undergraduate study corroborates that report.”\*

It is well documented that women suffer discrimination in hiring, salary, and promotion practices in science and medicine.<sup>1</sup> A look through the current medical school catalogues in any library will reveal that the number of women who have professorial rank or are heads of academic or clinical departments is miniscule. This means that policy decisions are largely uninfluenced by women faculty and that one-third of every medical school class lacks role models.

Do not underestimate the importance of role models. They do not all have to be of the same sex, and in my own case they were not. But I will never forget the encouragement I got from a brief encounter on a Sunday morning at the MGH during one of my fourth year clinical clerkships. I asked one of the endocrinology fellows to help me with the interpretation of some lab tests. She did, brilliantly, while her two young children played in the corner of the laboratory. “Look at Dr. What’s-Her-Name and her kids,” I said happily to myself. “They’re alive and well and making it. Maybe I can too.” My daughter, who is applying to medical school, currently works as a technician for a top-notch molecular biologist at Columbia. We are delighted at the experience she is getting in an exciting, productive laboratory, run by a woman. In my own laboratory I try very hard to help my associates to work out arrangements whereby they too can “make it.” It is a way of paying off a debt to those who did the same for me.

But what do women contribute to medicine? Anything? This question probably sounds condescending, inappropriate, and even quaint to most of us today. But some physicians have always thought that the chief purpose of a woman in medicine is to be a good patient. Fortunately, there were those in the medical establishments of the ‘50s and earlier who thought women could and should be good physicians. I will always be grateful that this was the matter-of-fact expectation of many here at Harvard. Most faculty members, then as now, assumed that the women, like the men, would do their best and that their best was very, very good.

There remains the question of whether women can contribute something unique to medicine. I shall return to this subject later, although my answer is a highly qualified “yes.” I cannot resist first reminding you that there are still physicians out there who believe that the biological facts of femaleness are an absolute disqualifier for responsibility outside the home. Not all that many years ago, a physician-adviser to a president and vice president of the United States created a little tempest when he remarked publicly that “the raging hormonal storms” to which women are subject make them unfit for high public responsibility.

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\* I am informed that the actual number of women medical students responding was very small (19 out of 202, or 9.4%). The survey results therefore may not present a valid picture.

The woman looking for the rainbow at the end of these raging hormonal storms was cast into outer darkness by another famous physician-writer of the same period. Dr. David Reuben, in *Everything You Always Wanted To Know about Sex but Were Afraid To Ask*, a book which came out in 1969, wrote:

“To many women the menopause marks the end of their useful life. They see it as the onset of old age, the beginning of the end. They may be right.

“Having outlived their ovaries, they may have outlived their usefulness as human beings. The remaining years may be just marking time until they follow their glands into oblivion.”<sup>2</sup> (He then goes on to push estrogen therapy.)

I do not remember any gynecologists or endocrinologists, or for that matter, book reviewers who disputed Reuben’s point of view or even his blatant errors at the time. Perhaps they did.

Most of us today would quickly discount these pronouncements as outrageous prejudice. However, both these physician-publicists are educators of a larger population than most of us will ever reach. The 1979 edition of the Reuben sex book announces that eight million copies are in print. We should not forget that prejudice shapes politics and politics shapes institutions, including medical schools. Which brings me back to my earlier observation that there are very few pre- or post-menopausal women in the higher reaches of the medical world. I hope, however, that this is changing — that the winds of liberation are blowing even at these rarefied altitudes.

I now want to come back to the title of this talk, the second half of which is: *The Couch in Building A*. The couch in Building A is *not* a psychoanalytic couch. To my knowledge there was no such thing anywhere near Building A. The couch living in my memory was in the Ladies’ Room in the basement under the Dean’s Office. (If it is still there, I am sure it is called the Women’s Room by now — if the feminist protagonist of Marilyn French’s book, set at Harvard, has run her magic marker through the word “Ladies” and substituted “Women.”)<sup>3</sup> Twenty-five years ago there were no living quarters for women in Vanderbilt Hall. My problem was my devotion to a fifteen minute catnap in the middle of my typical sixteen hour day. My solution was the Ladies’ Room couch, and I found it highly satisfactory for a while. However, one day I was awakened by a woman, or perhaps I should say lady, who worked in one of the administrative offices in Building A. She said she was sorry, but that couch had not been placed there for medical students. The truth of her statement was beyond dispute. That couch had been there long before the first female medical student. So I went back to napping in the library.

The point of this story might be the contrast between the living arrangements for women students twenty-five years ago and the present excellent housing in Vanderbilt Hall which was described so movingly in a recent issue of the *Alumni Bulletin*. But I really want to comment on another remark of the lady in Building A as I was packing up my books to leave. “I have to work,” she said. I thought at the time her remark was a non sequitur, but of course it was not. Although I am still not certain what all she meant, I suppose she may have been saying that she worked out of economic necessity, which made her tired, while I, entering into the medical profession with all of its privileges, had

forfeited the right to share in a small fringe benefit accruing to the female proletariat of Harvard. In other words, "You've made your own bed, and don't try to take this one over." It suggests a certain lack of solidarity or sorority among the women of Harvard. Perhaps today this is not quite as true. Maybe today she and I would be serving together on the day care center committee, or lobbying for flex time or job sharing. I do not know. I do know that today at least I would have told her, "Listen, I need to work just as much as you," and I would have requested that the administration put in another couch. And also, nowadays, having learned a little from my daughters and their friends, I would complain if I did not get it. And I would go to my fellow women medical students and possibly, our vision now enlarged to a lounge with couches and a coffee machine, we would put together a petition to the administration and even write a few letters to alumnae.

We did not do those things twenty-five years ago. We had not yet been stirred by the civil rights struggle, or the antiwar movement, or the student movement, or women's liberation. We were rather individualistic people, rather isolated, perhaps competitive, very busy of course, and tired most of the time. Probably we thought that complaining or asking for more was selfish or ungrateful — after all we were at Harvard and we knew how lucky we were. We did not really place ourselves in the history of the long struggle for the equality of women. Many of us preferred not to see ourselves as part of that history, that "book of myths," in Adrienne Rich's phrase, "in which our names do not appear."<sup>4</sup> Much of this part of our education and our history was to come in the decades after Harvard. In these years we have been witnesses to and participants in extraordinary social transformations.

I will go back for a minute before I stop, to the question of the unique contribution of women to medicine. I think that most women physicians would like to practice their art and science without reference to gender, but this may be impossible at the present time. In any case, an awareness that style and life experience and social pressures are likely to influence even the purest of pure science is probably desirable. These influences will be felt especially in the areas of science which deal with human experience — which includes much of medicine and medical science.

Women physicians might be expected to have insights into medical problems affecting women, such as those related to pregnancy, and childbirth, some stress-related illnesses and cancer, contraception, child development, and the like. Many of these problems involve an extremely complex interplay of biological, social, economic, and cultural factors — which women perhaps can grasp rather readily. Let me try to illustrate. In my city, Washington D.C., infant mortality is higher than in any other city in the United States. Most of the mortality is associated with low birth weight. Low birth weight is caused by conditions in the mother that lead to premature delivery or poor intra-uterine weight gain. Thus, low birth weight can and should be thought of as a health problem of women.

Infant mortality became a political scandal in our last election campaign. There was a promise to fight it. A blue ribbon commission was appointed. Many good recommendations were made for improving prenatal care. But the primary recommendation and probably the only one that

stands even a chance of being implemented in these days of budget cutting is what I call the "technological fix" — that is, increased efforts to keep smaller and smaller premies alive through up-to-date resuscitation, transport, and intensive care. The small babies who survive are, of course, at high risk for a host of problems, as are their families and the larger society. The approach is wrong from my point of view, but it is where the money goes. Extending a pregnancy a week or a month nearer to term would do far more for the baby, the mother, the family and ultimately the public good, than the fanciest intensive care nursery. But prevention, to repeat an interesting characterization which is often used, is not "sexy."

Premature delivery is a disease of women, and a disease, moreover, of poor women. In the affluent Georgetown-Chevy Chase area of Washington the rate of prematurity is half that of the 14th Street riot corridor, and infant mortality is about one-third. On 14th Street, poverty, unemployment, discrimination, and hopelessness are facts of daily life for women, facts that bear a complex, but intimate, relationship to the lengths of their pregnancies.

This is a problem, like others I could mention, that affects all of us. But it is a problem for women in a special sense, and for advocates of women's health and well being. Advocacy needs to be expressed at many levels — in public policy, in the organization of the outpatient department, in the neighborhood. I have been involved in the effort to start a community drop-in center in a low-income neighborhood. Its outreach will be to adolescent parents and to women struggling to raise their children alone. Called "The Family Place," it will try to offer a range of supportive services, and counseling in child development in order to foster competence and self-confidence in parents and enhance their capacities to nurture their infants.

The ability to give "delicate, soothing attentions which are always so grateful to the sick" was tagged as the special province of "noble, sensible, and tenderhearted women" in a letter to the *American Medical Times* of July 1861.<sup>5</sup> So it is. Perhaps we are learning, however, that this ability no more needs to be exclusively female than the ability to frame the questions, set the policies, educate the physicians or allocate the funds needs to be exclusively male. And moreover, that it may be impossible to solve the major problems unless the talents and abilities and spirit of all of us are enlisted. □

## References

1. e.g., cf. *Climbing the Academic Ladder: Doctoral Women Scientists in Academe* (Washington: National Academy of Sciences, 1979).
2. Reuben, David, *Everything You Always Wanted to Know about Sex but Were Afraid to Ask* (New York: David McKay, 1969; Bantam edition, 1971), p. 366.
3. French, Marilyn, *The Women's Room* (New York: Summit Books, 1977).
4. Rich, Adrienne, *Diving Into the Wreck, Poems 1971-1972* (New York: W. W. Norton and Co., 1973), p. 24.
5. *American Medical Times*, July 18, 1861, pp. 25-26, 30, quoted in Baxandall, Rosalyn; Gordon, Linda; Reverby, Susan (editors), *America's Working Women, A Documentary History — 1600 to the Present* (New York: Vintage Books, 1976), pp. 75-76.



# GENES, GHOSTS, AND GOBLINS

*Why is everyone so scared?*

by Bernard D. Davis

*Bernard D. Davis '40 is Adele Lehman Professor of Bacterial Physiology, director of the bacterial physiology unit, and director of the center for human genetics at HMS. His research is concerned chiefly with protein synthesis and secretion in bacteria. "The body's therapeutic response to infectious disease is to contain it," noted Dr. Rabkin. "Fortunately, the response of the best minds to therapeutic ideas is to voice them, and Dr. Davis's importance to Harvard has been his genesis and dissemination of ideas and issues, some of which seem to evoke a prominent host response."*

A disturbing question with a good deal of importance for medicine, as well as for society as a whole, has been raised with increasing insistence in recent years: is scientific research now reaching into areas that society should restrict, because the resulting knowledge might threaten our welfare? The question could hardly have occurred to anyone a few decades ago. Yet today it is not confined to extreme critics of existing social institutions. Even such a traditional scientific journal as *Nature* has suggested that the answer may be yes.

This development is one expression of a broad decrease of confidence, at least among intellectuals, in progress through science. The reaction started when people began to recognize, belatedly, that large-scale technology has costs as well as benefits — the gravest cost, of course, being the danger of nuclear annihilation. More recently similar questions have been raised about the biomedical sciences, and particularly about genetics.

However, there is a basic difference between the perceived threats from the physical sciences and those from the biological sciences. With the physical sciences we find that real, present costs or dangers are the cause of concern, and the resulting demands are for control over the technological applications that create these problems. With biology, however, we are dealing essentially with conjectural future hazards. Accordingly, the demands are for control over the basic research that is expected to create these hazards, rather than over the applications as they arise. The question I shall address is whether our projections of future dangers, in several areas of research, are reliable enough to justify such a radical change in our attitude toward freedom of inquiry.

Let me start with the area of most intense public concern over genetics: the fear that recombinant DNA research will produce dangerous new organisms. I shall deal with this issue only briefly, because the furor which had surrounded it has largely subsided. Not one day of even mild illness has been traced to this source, and sober assessments of probabilities have replaced the initial demands for absolute security against various conceivable catastrophes. Accordingly, the NIH guidelines regulating this work have been very much relaxed — although we still have a heavy bureaucracy.

Nevertheless, we went through an expensive and traumatic debate, and we narrowly escaped the severely restrictive, punitive legislation pushed by the senior senator from Massachusetts. If we are fortunate, or wise, we will learn some lessons from this experience, and we will try to devise better ways to handle the problem next time — without chasing goblins, without confusing technical and moral issues, and with a sharper focus on truly protecting the public interest rather than on asserting public rights. I would make only one specific suggestion:



that a responsible procedure should try not only to protect society from hazards but also to protect it from unwarranted alarm, and from incitements to media hype. If so, it would seem sensible for the scientific community to be allowed some discretion and privacy, like a physician, during the early stages of assessing a conceivable hazard. None of you, in dealing with a patient, would mention a particularly threatening item in a differential diagnosis until you had positive evidence for it.

So much for the fear of the products of recombinant DNA research. But beneath it lay another fear: that this methodology would soon lead to the power to manipulate genes in human beings. In medicine the purpose of such manipulation, of course, would be gene therapy — the replacement of the defective gene responsible for a hereditary disease. One could hardly fault this aim by itself. However, rash predictions by a few scientists raised the specter of a much broader kind of genetic engineering. It then became widely assumed that genetic techniques used for therapy could also be used to manipulate behavior, for political rather than for medical purposes.

On closer scrutiny, the technical facts do not seem to me to justify this assumption. For one thing, the replacement of single genes, except in the loosely organized cells of the bone marrow, is still only a distant possibility. Even if it should be achieved we would be a very long way from any reliable genetic control of behavior. One reason is that a huge number of genes must influence any behavioral trait. In addition, most of the genetic shaping of individual differences in behavior happens before birth, in the specification of the wiring diagram of the brain; genes introduced later could influence behavior to a limited degree, by altering the fluid surrounding the cells, but they could not rewire the brain.

Besides these technical safeguards, a more fundamental consideration is that any basic knowledge is double-edged. Possible applications can have both good and bad consequences, and we simply cannot foresee these in detail. This pragmatic consideration underlies the traditional policy of our society, to allow controls over potentially dangerous actions and applications, but not over knowledge.

Having disposed so briefly of dangerous products and dangerous powers, I would now like to spend a bit more time on the third area of concern, which is the most troubling to our society: the fear that new scientific insights may threaten the foundations of public morality. In Galileo's day, and in Darwin's, the source of the resistance was religious, but today it is primarily political. And the problem is likely to grow; although the perceived threats now arise from developments in human genetics, I suspect that before long neurobiology may achieve a similar distinction.

We might look at three current examples. The first is concerned with defining the consequences of having an extra X or an extra Y chromosome. These consequences are little understood, and earlier sensational newspaper accounts distorted the issue by identifying a supernumerary Y chromosome as "the gene for criminality." A few years ago it became possible, through improvements in karyotyping, to screen newborns on a large scale, and hence to undertake a longitudinal study of the physical and mental development of the occasional individuals (ca. 1/1000) with

these chromosomal abnormalities. Such a study at the Children's Hospital here was attacked publicly by a group called Science for the People, led by one of our faculty members, on the basis of the conviction that attention to any alleged genetic components in behavioral problems will divert society from correcting the true, social causes of these problems.

In the ensuing discussion criticism was shifted from this ideological basis to the methodological limitations of the study, and to the possibility of harm as well as benefits to the subjects. These are real problems, but on balance the faculty voted approval overwhelmingly. Nevertheless, the harassment resulting from the public attack led the investigator to discontinue further screening. Unfortunately, the administration took no public steps to defend the investigator, or to defend the principles that were under attack, and the success of this assault at Harvard has discouraged investigators elsewhere from pursuing similar studies. We still know little about the significance of an XYY karyotype, and the problem will increase as karyotyping becomes more widespread. Moreover, the public misconception about XYY still awaits correction.

A second example has arisen very recently: concern over industrial screening of job applicants for enzymatic deficiencies that impair detoxification of various chemicals, thereby increasing susceptibility. A series of articles in the New York Times, reporting on apparent misuse of such tests, featured the view of critics who saw the screening itself as malign — a device that deprives people of the right of free access to a job, shifts the blame for toxic reactions from the employer to the worker, and relieves the employer of the obligation to keep ambient levels low enough so that nobody could be harmed.

I do not know how well industries are performing the tests for these deficiencies, or how wisely or rashly the results are being interpreted. And I do not question the importance of critically evaluating the practice — mistakes and abuses are almost inevitable. But the criticisms directed at the principle of screening are another matter. If it can be shown that some people have a genetic predisposition that would greatly increase their risk in a particular kind of job, that information can surely be used to advance, rather than to threaten, their interests. For example, one could hardly defend the right of a hemophiliac to be employed as a butcher — nor would any sane hemophiliac want the job. I would also question the assumption that limits ought to be set low enough so that nobody could be harmed. This proposition is politically attractive, but it can hardly be economically feasible to set industrial standards on the basis of the responses of a rare human mutant, rather than of individuals within the normal range.

The problem arises because many genetic predispositions are not so obvious to the bearer as hemophilia. Moreover, our ability to identify them is likely to grow rapidly. For example, in addition to advances in the study of detoxification, advances in immunogenetics may soon lead to identification of individual differences in the likelihood of developing various allergies. Illnesses formerly viewed as acts of God thus become predictable, and often preventable. We may not wish to play God, but if we have the ability to recognize individual genetic differences it is hard to see how we can escape the responsibility for incor-



porating this knowledge into preventive medicine.

My final example is the most troubling of all: the controversy over the contribution of genes to differences in intelligence — or, more broadly, to differences in any behavioral trait. Probably few environmentalists, however committed, really believe that all normal individuals are equipotential. Nevertheless, there is widespread tacit agreement that we should not concede or discuss genetic differences in abilities, lest we weaken the current thrust for greater equality. Accordingly, virtually all public discussion of education today, and most of social science, studiously ignores the relevance of these differences. On the other side the heredity-environment interactionists (who are regularly mislabeled as hereditarians or as genetic determinists) believe that genetic differences are a legitimate area of study. If we recognize the role of such differences as well as that of cultural influences, our social programs should be more firmly based on reality and hence more effective.

The controversy may continue indefinitely, because the genetic analysis of polygenic traits, including behavior, is still primitive. Molecular genetics has revolutionized the study of monogenic diseases, but not of traits whose many genes cannot yet be defined. Instead, for these traits we can only draw rough statistical conclusions from population studies on the magnitude of the environmental and the genetic components of the observed phenotypic variance. We cannot pinpoint the genotype of an individual by direct measurement of any gene products, as with an enzyme deficiency or an abnormal hemoglobin. The scientific evidence is thus much like that in epidemiology; as in many medical problems (including the germ theory of disease a few centuries ago), such evidence is not direct enough to force skeptics to abandon their preconceptions. Perhaps we will have to wait for a molecular genetics of behavior before they are convinced.

Nevertheless, even if no one had ever tried to measure IQ and to estimate its heritability, what we know about evolution, and about the rapid changes it has produced in the human brain, would lead to the inescapable conclusion that human beings vary widely at birth in their behavioral traits, just as in physical or in biochemical traits. This variation is something every mother knows. It is also something every physician recognizes, and will have to recognize more. Today we are discovering that tendencies to various diseases are linked to differences in HLA types, but in the future we will surely be dealing also with differences in the levels of neuropeptides, or in their receptors, or in the molecular components of synapses — the molecular genetics of behavior that I have just mentioned.

In the discussion of this subject I find it remarkable that so much effort has been made to deny human genetic diversity, instead of recognizing it as something to treasure and to celebrate. With all species, it is an axiom of evolution that diversity promotes survival. And our species derives an additional advantage: behavioral diversity enormously enriches our culture. What a dull world it would be if we were all members of one clone! And in a society with many different kinds of jobs to be done, how fortunate that individuals have different strengths and different tastes, all influenced both by genes and by culture. But this diversity, like technology, creates problems as well as solutions.

In the last twenty years our response to these problems

has benefited from a great moral advance: the drive for increased social equality. We recognize that there is no single yardstick for human worth — neither intelligence nor any other trait. We also recognize that we have generally underestimated the potentials of women and of people with a different cultural background, and our sense of justice today requires us to try to release this buried talent and to remedy educational limitations imposed by a history of discrimination. But much of the egalitarian movement has gone beyond this aim, proceeding as though equality depended on identity, and defining equality in terms of groups rather than in terms of equal opportunity for the individuals who make up these groups.

This conflict over the meaning of equality is one important factor in the current opposition to behavioral genetics. Another is the tragic misuse of genetics in the past. We now scorn the premature, primitive extrapolations of the Social Darwinists and of the eugenicists, and we are vividly aware of how racists have used genetic claims to rationalize discrimination, slavery, and even genocide. It is therefore understandable that people of good will are so often suspicious of human behavioral genetics. But the genetics invoked in these earlier rationalizations was grossly distorted. If we fail to distinguish such politically motivated pseudogenetics from an honest effort to improve our knowledge of individual differences, we will decrease our ability to maximize the fulfillment of individual potential, and we will seriously damage our educational system. We will also be subordinating the scientific search for objective knowledge to ideology, just as Hitler did. His ghost could then chortle at his continued malign influence.

The overall message of my several case histories is that freedom of inquiry needs constant defense, and today the battleground is genetics. To be sure, in the recombinant DNA debate constitutional lawyers agreed that freedom of scientific inquiry is protected by the First Amendment, as a form of freedom of expression. But this bulwark against governmental tyranny is only mildly reassuring. A Lysenkoist suppression of an area of research could be accomplished, as in the XYY case, without any governmental decree, simply by creating a climate that discouraged people either from entering the field or from funding it.

Let me conclude with a story. Some time ago I had a heated debate over this topic with a colleague. He fears most a repetition of the Hitlerian misuse of genetics. I fear, on the other hand, that abandoning the search for objectivity and rationality increases the likelihood of falling victim to those who would think with their blood. But despite these opposite views, we have the same moral concern. Moreover, we have similar backgrounds: if his parents had not left Germany, and if mine had not left Russia a generation earlier, we might both have become cakes of soap. The irony of our differences led me to think of the story of the two Jews who emigrated to Paris, had a successful partnership in business, and then had a terrible falling-out. As befitted such assimilated gentlemen, they arranged a duel, at sunrise. The sun rose on one dueler, but the other was not to be seen. Finally a horse appeared at a furious gallop, and its rider delivered a letter. It said, "My dear Maurice, if by any chance I happen to be a little late, don't wait — shoot." □

# AH, SCHISTO!

*Notes on how to cure a snail, correct Henry Kissinger,  
and lead the world to the discovery  
of a great neglected disease*

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by Kenneth S. Warren

Kenneth S. Warren '55's work in tropical medicine has been gratifying, explained Dr. Rabkin, because it has been two-fold. "He took the stimulus that he received at Harvard and was one of the major people who brought schistosomiasis into contemporary biomedical science, to the benefit of untold millions around the world. Second, and almost of equal importance, he has maintained his undergraduate weight." Dr. Warren is director for health sciences of the Rockefeller Foundation, professor of medicine at New York University, and adjunct professor at Rockefeller University.

**A**bout five years ago I received a phone call from the State Department saying that Mr. Kissinger wished to address the United Nations on *schistosomiasis*: what should he say? Anything, I said, as long as he pronounces it correctly!

Only last week I was asked for the ten thousandth time, "How did you ever get into schistosomiasis?" To those deeply immersed in the subject these half inch long worms are a never ending source of fascination. They live, as the parasitologists say, "in copulo" twenty-four hours a day for as long as twenty years producing three thousand offspring daily. Another characteristic of schisto is that its eggs pass out into the world in one form or another of human excreta. Many a time I have been so carried away by my interest in these worms as to regale dinner guests with tales of their prowess and versatility until I felt a sharp blow on my shins from my long-suffering wife — an artist and designer who lives in a different world of beauty.

Well, how did it all happen and where has it taken me? It happened because of a belated and most unlikely love for biomedical research, and it has taken me around the world, north, south, east, and west, many times. I was one of those who always wanted to be a doctor, but in college was seduced away from biology by American history and literature. But what difference did it make, since I planned to become a practicing pediatrician? Again, I was seduced, but this time at Harvard Medical School. I found research irresistible, migrating like a ski bum from slope to slope: low oxygen induced teratogenesis in rats, ultraviolet induced mutations in bacteria, bacterial induced infections in rat kidneys, and alcohol induced hepatic coma in people.



The excellent course in parasitology and tropical medicine at HMS revived an intense desire to travel to all of the exotic places of the world, and I became an addict for the tea parties and loathsome diseases presented at intervals by the department of tropical public health. With these interests I interned at the ideal place, the Boston City Hospital. It not only provided me with the infinite resourcefulness necessary for work in the tropics, but I always had a ready answer for the inevitable apologies for the state of the hospital in places like Dar es Salaam, Bahia and Leyte. After this unique experience I decided to fulfill my service commitment immediately. On the advice of the tropical medicine people I called a Naval officer in Washington and stated that I would like to enlist and be assigned to NAMRU 3 in Cairo. The gentleman quickly replied: "Listen, sonny, you join the Navy, and we'll tell you where you're going."

Thus, on to the Public Health Service and the Laboratory of Tropical Diseases at the National Institutes of Health. I was welcomed to the fold and on my arrival was



graciously told that almost anything was being studied in the laboratories, and that I should wander about for several weeks and pick a parasite.

In the second lab I entered, I found a renowned parasitologist working with mice chronically infected with *Schistosoma mansoni*. I asked him whether they had esophageal varices, and he said, what are those? In any event we examined some of the animals and found that virtually all of them had large periesophageal varices. These mice, with the typical syndrome of hepatosplenic disease, were the basic model for many years of work on the pathogenesis of schistosomiasis. A crucial point in my career came after two years at NIH, when my service commitment was fulfilled. I consulted two of my old teachers, one in tropical medicine and the other in infectious diseases. I asked the first if I should take my boards in internal medicine. He said yes. I said why. He said you will make more money and you will find it easier to get jobs. I said will it help my research. He said no. He was right in all respects. I did not take his advice. I asked the second whether I should take a Ph.D. in microbiology. He in turn asked if I could do research. I said I thought so. He agreed and then said a Ph.D. was redundant. I took his advice and thus stayed on at the NIH.

In 1958, in my twenty-ninth year, I made my first trip abroad to England, then to Stuttgart to collect a Porsche to drive to Geneva, and afterward to Lisbon for the International Tropical Medicine meetings. I then drove back to England to attend the London School of Tropical Medicine, and later the postgraduate Medical School at Hammersmith where I had the great pleasure of working with the redoubtable Sheila Sherlock.

After returning to the NIH, I began to think it ridiculous that I had never been in the tropics. In 1962 I engineered a research project in Brazil on hepatic coma and ammonia metabolism in patients with hepatosplenic schistosomiasis. We spent a year and a half in Bahia, a lovely old Portuguese colonial city, located on the magnificent Bay of All Saints and inhabited by many of the best writers and artists in Brazil.

After the broadening experience of working in a university I decided it was time to leave NIH; simultaneously I was presented with three interesting opportunities. The Rockefeller Foundation suggested that I go to Mwanza, Tanzania to prove to Julius Nyerere that *Schistosoma mansoni* caused serious liver disease among his people and should be controlled. Thus I made my first visit to Africa — to the place where Speke first saw Lake Victoria — and had a magnificent time discovering that both malaria and alcoholism were rife. Since hepatosplenic schistosomiasis can be detected only by palpating the liver and spleen, this did not appear to be a tenable project.

I was then invited to New York to help a professor of tropical medicine produce immunity to schistosomiasis in mice by irradiating the infective larvae with the cobalt bomb. I said that cercariae had already been irradiated with x-rays, ultraviolet rays, and more, but he insisted that I try the bomb.

Finally, I visited Cleveland, where a high-ranking professor of preventive medicine showed me a lovely new laboratory and said, this is yours, do with it what you wish. How could I resist?

My own research style is essentially collaborative, and Western Reserve turned out to be a paradise in this regard. I soon had projects going with the departments of medicine, pathology, surgery, pharmacology, microbiology, and anatomy involving electron microscopy, microcirculation studies by cinemicrophotography, intermediary metabolism, cellular immunology, chemical mediators of inflammation, immunochemistry and immunosuppressive agents. I became more and more involved with immunology, and with the aid of a medical student, three superb fellows from the Philippines, Israel, and Egypt, and several immunologists in Cleveland and elsewhere eventually demonstrated that schistosomiasis is an immunological disease due to the inflammation induced by cellular hypersensitivity to schistosome eggs trapped in the host tissues.

After a couple of straight years in Cleveland I decided that a tropical medicine man had to work at least part time in the tropics, and had the audacity to ask the Rockefeller Foundation to support this in a unique way. They provided us with fifty thousand dollars for three months each summer for three years at their great schistosomiasis control project on one of the most beautiful islands in the Caribbean, St. Lucia. Funds were provided not only for myself, but for my wife and children, a colleague and his family, and students and house officers. We actually were able to continue the project for four years, the equivalent of a year in situ on the island, brought down three colleagues and nine students and published fifteen papers. I reiterate, at a total cost to the Rockefeller Foundation of fifty thousand dollars.

That reasonably cost-effective program was succeeded by a grant from the Edna McConnell Clark Foundation for three summers in Kenya. This Foundation, which owes its existence to Avon products, decided several years ago to do something about health in the tropics by focusing on one disease, to the eternal gratitude of the aficionados of schistosomiasis. With two million dollars invested annually and the development of an integrated strategic plan for research, the Clark Foundation has had an enormous positive effect on tropical medicine.

With respect to travel we chose well again — Kenya is one of the more fascinating places on this earth. Viewing the animals of the game parks and the Serengeti plain becomes an addiction, but the people, the Masai, the Turkana, the Luo, the Kamba, the Kikuyu, each with its unique appearance, life-style, and language, are even more interesting. I soon learned how to say, “Take a deep breath,” in three languages. Again we brought several colleagues and their families plus house officers and again we produced a spate of clinical and field studies.

A significant change was occasioned by the fashionable metamorphosis of departments of preventive medicine (ours had been devoted largely to research on infectious diseases) into departments of community health. It was helpful, therefore, to be offered a position in the department of medicine, which may have been due to a certain extent to my collaborative studies with the chairman of the department on the treatment of schistosomiasis in snails. (Incidentally, we were the first and only group in the world ever to cure snails of this dread disease. Nobody else seems to have bothered. As a matter of fact, it's cheaper to kill them than to cure them.) Just a few years thereafter I was



given the opportunity to expand what was essentially a one man show into a group effort. Our new chairman, Charles C. J. Carpenter, who had spent several fruitful years in India and Bangladesh working in the great diarrheal diseases revolution, offered me the chance to form a division in the department of medicine. In discussing its proposed title I suggested tropical medicine. Chuck said, "Tropical medicine is a pejorative term," and we then decided to call it geographic medicine. The Rockefeller Foundation again came through, this time with a half million dollars, and we were on our way.

The scheme of the division followed that of our cost-effective summer programs. All those in it were given the opportunity to work for several months each year in the tropics. Furthermore, it was agreed that time spent abroad during clinical research would be a part of our obligation to the department of medicine. To our surprise and gratification, in less than one year we had gathered together a group of young people who could really encompass both laboratory work in Cleveland and field work abroad. In addition to my great Egyptian colleague, Dr. Adel A. F. Mahmoud, we were joined by an Australian allergist from the jungles of New Guinea, a Cleveland couple (pediatrician and hematologist) who had just begun working on sickle cell anemia in India, and an infectious disease man who had been working on typhoid and plague in Vietnam.

After a few years, when the division of geographic medicine was well underway, we invited John Knowles, president of the Rockefeller Foundation, to be the first annual lecturer in geographic medicine at Case Western Reserve University, and to review our progress. Those wonderful young people in the division were not only versatile in the lab and in the field but all of them were highly articulate. They told of research on filariasis in the Philippines, schistosomiasis in Kenya and Egypt, relapsing fever in Ethiopia, sickle cell anemia in India, and trichinosis and giardiasis in Cleveland. Knowles was so overwhelmed that on the way to the airport he mentioned to me the possibility of a position at the Rockefeller Foundation.

A month later I attended the last clinical research meetings in Atlantic City before flying to Cairo. While wandering among the book stalls I came across a new CIBA Symposium entitled *The Future of Philanthropic Foundations*, with articles by Knowles, McGeorge Bundy of the Ford Foundation and others. I glanced through it, then put it down and started to walk away. The salesman stopped me and said if I was interested he'd let me have the book for half price. I couldn't resist the bargain and read the book on the way to Cairo. It was a revelation. I suddenly realized that the "difficult art of giving," in the words of my illustrious predecessor, Alan Gregg, could be a creative endeavor. One develops programs and then seeks out those who can best do them. That summer in Kenya I began to toy with some ideas and within one week of my return to the USA I received a call from John Knowles saying in his typically pungent manner, "get your ass down to New York for a talk about the directorship for health sciences."

When I arrived, Knowles offhandedly asked me if I had any idea how foundations worked. Then and there I presented him with what is now our major health program at the Foundation. The aim of this program was to attract some of the finest clinical and basic scientists into working

on what we called The Great Neglected Diseases of Mankind. The methodology involved setting up a series of units, each large enough to attract and train bright young investigators. These units would be gathered into an international network which would congregate annually for a scientific meeting. Knowles liked it, Case Western Reserve was cooperative, since I had a superb deputy director in Cleveland, and I joined the Rockefeller Foundation nine months later, in July 1977.

Within five months the board of trustees had agreed to the program and within one year we had ten units functioning; at present we have reached our maximum of fourteen. These include six medical units, four divisions of geographic medicine at Tufts, Virginia, Case Western Reserve, and Washington, one division of tropical medicine at Oxford, and a clinical research unit in Cairo. Four biochemistry/pharmacology units were established at Rockefeller University, Case Western Reserve, Mexico City, and Bangkok, and four immunology units at Harvard, Stockholm, the Weizmann Institute in Israel, and the Walter and Eliza Hall Institute in Australia. The quality and quantity of work put out by these units has been remarkable. For instance, at Rockefeller University a new cure for trypanosomiasis in cattle — and presumably in people with sleeping sickness — has been developed by boiling blood in vinegar and injecting the resultant crystals. In Cleveland the pharmacology group has isolated, characterized, and synthesized a new and extremely powerful suppressant of cellular immunological reactivity which is a metabolite of an anti-schistosomal drug. The medical group has successfully vaccinated mice against filariasis. In Australia immunologists have been able to produce immunity against epididymitis, which the CDC now calls the most common epidemic waterborne diarrheal disease in the USA.

What was the outcome of my original desire to do research and to travel? With respect to the former, my choice of schistosomiasis was a good one. I enjoyed the wide open spaces rather than the crowded corridors of the cancer and cardiac specialists. I must also reiterate that my early advisor at Harvard was right. I held only two jobs in my first twenty-one years since internship and in comparison with clinical salaries I was grossly underpaid. While this did bother me at times, I finally realized my great good luck. How many people in clinical areas can have two straight decades devoted almost exclusively to laboratory and clinical investigation? This was followed by the chance to develop a new and effective way of doing research on tropical diseases — which was implemented in a fine medical school — and by the further opportunity to spread the system throughout the world.

Although I may have given something to schistosomiasis, schistosomiasis has given me far more. To carry the metaphor even further, through the Rockefeller Foundation, the Edna McConnell Clark Foundation, and now the Tropical Disease Research Programme of the World Health Organization, schistosomiasis is leading superb scientists to a veritable renaissance of interest in the Great Neglected Diseases — a development that should contribute to the "well being of mankind throughout the world." □



# GERIATRICS: THE FRUITION OF THE CLINICIAN

*As so much of our population  
ripens toward old age,  
the physician must also mature*

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by T. Franklin Williams

*T. Franklin Williams '50 has become a true friend to the elderly. He is committed to the improvement of teaching, care, and research in geriatric medicine both locally — in Rochester, New York — and nationally. At the Monroe Community Hospital he is medical director and at the University of Rochester he is professor of medicine, preventive medicine and community health, and radiation biophysics.*

The latter part of the title of this talk, namely "The Fruition of the Clinician," is borrowed from the title of an address given by one of our great teachers, Henry A. Christian, at the dedication of the Syracuse University College of Medicine Building in 1937. He spoke then of the extensive learning that must take place over many years before one can enjoy the full fruits and satisfactions that come to an accomplished clinician. My theme today adds to what Dr. Christian had to say; in geriatrics, the care of the elderly, the clinician can find the greatest challenges and the greatest satisfactions. Good geriatric care really calls for the best a physician has to offer, and in turn yields not only the tangible benefits to one's patients but also a better understanding of complex problems.

My basis for discussing this theme comes from my experience during the past twelve years in Rochester, New York, as medical director of Monroe Community Hospital, a large institution which offers a wide range of care for elderly and chronically ill patients; and as professor of medicine, in charge of the University of Rochester's pro-

gram to provide the entire medical and dental staff for the hospital and to make it an integral part of the university's teaching and research activities. Thus, my attention has been focused more closely on the care of elderly patients than may be true for some. But with our increasingly aging population, all of us can be sure that we will be spending more and more time caring for older persons.

I would like to use three case histories to illustrate a few of the things I have learned from older patients. Mrs. A was transferred eleven years ago at the age of sixty-five to Monroe Community Hospital from an acute general hospital. The admission note stated: "She is here to die of her intractable congestive heart failure." She had rheumatic heart disease with mitral stenosis and insufficiency plus such severe stenosis of her coronary arteries that she was deemed too risky a candidate for valvular replacement surgery. I met her about a year and a half later on one of our long term care nursing units where, instead of dying, she was beginning to be able to carry out some of her own activities of daily living. It turned out that with careful management, Mrs. A had slowly stabilized and improved and had been transferred to progressively less intensive levels of nursing care.

In the next year she made further improvement and was able to move out of our institution into a supervised residential home. Over the ensuing eight years she had several episodes of severe illness, including appendicitis with perforation, two bouts of pneumonia, and incidences

of severe cardiac arrhythmias, which required further hospitalization. But each time she made a satisfactory recovery, and with the help of her supervised living situation and regular visits to our clinic she lived a reasonably comfortable and active life, taking part in social activities and visiting regularly with her children, until she died rather suddenly this spring. I was her primary physician, in and out of the hospital, for her last ten years. I shared her care (and the learning that went with it) with dozens of residents and medical students.

Mrs. B is a seventy-five year old woman who, despite her physical disabilities and complaints, is the single stabilizing influence in the home she shares with her granddaughter and the granddaughter's husband — both of them have serious psychiatric disorders, and one has diabetes as well — and a great-granddaughter just entering her teens. Mrs. B is determined to survive to see that her great-granddaughter gets a fair chance at life.

Medically speaking, Mrs. B has severe osteoarthritis; for this condition she has gone through the best consultations and the trials of every available anti-inflammatory drug and the replacement of one knee joint, but she remains largely confined to a wheelchair. She also has cancer of the breast, and has had a partial mastectomy and two episodes of hemorrhage from colonic diverticula. She worries and complains about all of these problems in addition to other symptoms for which we have found no organic basis. Her depression, which is sometimes quite obvious, has seemed to respond somewhat to antidepressant medication.

She insists on being seen at least monthly for reassurance and maintenance. She has home help three days a week, and attends a day care program once a week. With Mrs. B our goal is clearly to help sustain her as she works to see her great-granddaughter on to successful adulthood. Caring for her requires an understanding of her total situation, much patience, and continuing attention to what are quite real physical and emotional diseases.

Mrs. C, at age seventy-three, called and asked to see me because she had heard that I was interested in older people with problems. She had a problem, which turned out to include generalized pain, varying in intensity, throughout her arms and legs. This was not relieved by anti-rheumatic medications, and before she came to me no physician had seemed able to do anything to help her. On examination she had no discernible physical abnormalities, and various laboratory tests, including sedimentation rate, were normal. She was afraid she had cancer, and described taking care of both her mother, through her terminal illness of cancer at age ninety-four, about ten years ago, and then her husband, who died of cancer five years later.

A psychiatric consultant concurred with my view that Mrs. C was depressed. She resisted this interpretation of her situation, but over the next several months she did show gradual improvement on antidepressant medications. Her strenuous complaints about pain slowly subsided, and for a time her regular visits focused on such minor symptoms as scaling in her hair. She then began to complain more about bowel irregularities, with constipation sometimes and some loose stools on other occasions. Rectal and sigmoidoscopic examinations were negative and our first impression was that these symptoms were another man-

ifestation of her underlying depression. However, with the appearance of progressive weight loss and unremitting gastrointestinal complaints, she was admitted for further studies. A constricting lesion of her stomach was identified, and at surgery proved to be gastric carcinoma with metastases throughout the peritoneal cavity; a palliative bypass operation was performed. She accepted the findings with considerable equanimity and seemed to feel almost better now that she actually had cancer than when she had simply feared she would get it.

Mrs. C wanted to continue to live in her apartment. A seventy year old sister came from California to stay with her, and with the aid of a special terminal care insurance plan in our Blue Cross and Medicare system it was possible to provide around-the-clock nursing services at home. I saw her there at least once a week until her death nine weeks later; frequently, a medical student accompanied me on these visits. Mrs. C remained fairly comfortable on medications and was mentally clear to the end. The most troublesome feature was the enormous turnover in home health aides and practical nurses: a total of forty-five different people took part in the sixty-three days of home care. The experience highlighted a serious problem in home care services, namely the weaknesses of the personnel practices, training programs, and supervisory and organizational components that exist in the ways home care is presently supplied and paid for. This and other similar incidents have convinced me that it is important for us to try other approaches, such as those used in England, Australia, and New Zealand, where teams of well-trained, salaried personnel give very flexible home services to all who need them in particular geographic or catchment areas.

These three cases may not seem out of the ordinary to many of you. Nevertheless, I think they show a few of the ways in which elderly patients present us with complex and varied problems. Mrs. A and others somewhat like her have illustrated for me the fact that severe cardiac failure and serious arrhythmias in older persons may stabilize and be manageable, with the result that a reasonably good quality of life can be extended for many years. Mrs. B reminds us of both the importance and the challenge of dealing with multiple complaints, and of being satisfied with helping to maintain remaining function, particularly when it is so crucial for the patient. And as I already mentioned, the last weeks of Mrs. C's illness suggest that we need to do something about the delivery of home health care services, so that someone who chooses to die at home will not have to contend with such a lack of continuity in her care. There are lessons here for us and our medical students to learn.

There are a number of blind spots or myths prevalent in our profession — as well as in society at large — regarding aging and the needs of elderly patients. One which may be both the most common and the most grievous is the tendency to blame all of the symptoms of older people on aging. Normal aging itself, we are learning more and more, is in fact a relatively benign process, with more than enough function preserved in our various organs to permit a normally active life at least until very advanced years. I expect all of us can think of persons we know who are healthy and effective in their nineties. The fallacy of blaming symptoms on aging is best illustrated by the story first told by Sir Ferguson Anderson, a leading geriatrician in Scotland. (His



anecdote was also quoted in a recent article by Dr. Robert Butler, director of the National Institute of Aging.) An elderly man consulted his doctor because his right knee was hurting. The doctor said, "Well, that's just old age; what do you expect at your age?" To which the old man replied, "But Doc, my left knee is as old as the right and it ain't hurting." We must treat the symptoms of older people with the same respect and attention we give to younger patients; the former will respond just as often as the latter to treatment aimed at relief of symptoms and maintenance of function, even when the underlying conditions may be chronic and not permanently curable.

Another major blind spot involves the failure to recognize depression in older people — a very common problem among them — or worse yet, misdiagnosing it as dementia. Two of the patients I've described are examples of this. I observed another instance when I was visiting in Australia and, with a geriatrician there, held a consultative clinic in a tiny back country community on the edge of the mighty River Murray. An elderly man was referred for consideration for placement in either a nursing home or hospital because his wife said he was getting progressively "senile," just sitting around at home all day, unresponsive. His local doctor had diagnosed the problem as dementia, secondary to a stroke that had occurred two years earlier. With a few questions, my fellow geriatrician brought out that the man was, in fact, totally oriented, and could give accurate details of events from both the recent and more distant past, including an excellent and correct account of the last minutes of the very important Australian football game that had been on television the night before. He had no traces of dementia, but was profoundly depressed.

A third neglected aspect of our care for the elderly is what some patients have called "the awful forty-eight hours" immediately after discharge from the hospital. Time and again old persons who live alone are sent home from hospitals, perhaps with some plan for home help, but with such lack of coordination that it doesn't begin until several days after the patient gets there. Even more often there is

no insurance to pay for care in the home. It is all too easy to picture the anxiety — and the potential for undoing whatever has been accomplished in the hospital — in the elderly person who is recovering from an operation or other serious condition and arrives at an empty house or apartment. There may be no food there, and in any case the person is likely to feel too weak to prepare an adequate meal, or to bathe or dress properly. If we as physicians insist on proper discharge planning for elderly patients we can at least help assure that our patients receive the care they need.

As a final topic, I want to list what I see as the future needs in geriatrics. First, there is the need for every physician to know more about geriatrics. The medical problems facing elderly people fall into the areas of competence and concern of virtually every field of medicine; in many general hospitals, the average age of medical and surgical patients is now somewhere beyond seventy. Thus, teaching about geriatrics should be included throughout the medical school curriculum, as well as in essentially all types of continuing medical education programs.

The second need is for more complete systems of care for the elderly — particularly the provision of alternatives for long term chronic and continuing care when required, including more and better home health services. To provide these will call for some way to include the payment for them in our health insurance system. Elderly people, even more than others, have no chance to earn extra money to pay for treatment of the diseases and disabilities that are likely to come to them. We, as a society, owe it to our older citizens to see that the necessary care is paid for without the present complicated and incomplete arrangements, and without forcing older people into degrading pauperism.

Finally, there is the need to develop leadership in geriatrics — in research, in teaching, and in specialized aspects of geriatric care — in the same ways we have developed it in medicine's other arenas. In summary, if you can give good care to an elderly person, you can probably give good care to anybody. □





# CLASS DAY 1980



Some people are grammarians, while others are very good at punctuating their sentences. In her opening remarks, Class Day Representative Hilda Anderson was reviewing four years of, in her words, "fun in the sun." She remembered the usual things: "Long days, sleepless nights, growing, discovery, frustration, anger, new understandings, time in which we accumulated an enormous quantity of information, and," she continued with only a trace of a dramatic pause, "came face to face with the realities of life and death."

Any signal she may have given at that moment was well-hidden from her Quadrangle audience. Nevertheless, some god somewhere must have seen or heard a cue; no sooner were

the words "life and death" intoned into the microphone than an enormous thunderbolt rocked the assembled multitudes. Laughter followed immediately, and rain a few minutes thereafter.

At one point the downpour drowned the PA temporarily out of service. When power was restored, and Judah Folkman was able to continue his interrupted address — "Is there a doctor in the house?" — he relayed the suggestion made to him in the interim by HSDM Dean Paul Goldhaber: "He said I should call this, 'Is there an electrician in the house?'"

Later, at the annual awards bonanza, a select group of deserving students, redoubtable faculty, and empathetic administrators received

their fair share of recognition for contributions to the academic and fraternal life at HMS.

Eighteen students were honored, either with cum laude or magna cum laude degrees or other special prizes (four who graduated with honors also received other awards). They were:

**Maria Carmalita Alexander-Bridges, Minerva V. Campos, and Larry E. Fields.** Kaiser/National Medical Fellowship Merit Award for outstanding academic achievement by a graduating minority medical student.

**Gilbert Chu.** Magna cum laude, and Henry Asbury Christian Award for notable scholarship in studies or research: "I. The Kinetics of Target Cell Lysis by Cytotoxic T Lymphocytes: A Description by Poisson Statis-





tics. II. A Poisson Analysis of the Possibility of Killer Exhaustion."

**Lewis R. First.** Louise B. Carr Prize for excellence in contributing to the betterment of medical school life.

**Steven E. Hyman.** Cum laude: "Agonist Mediated Regulation of Vascular Angiotensin II Receptors *in vitro*."

**Alan K. Louie.** Dr. Sirgay Sanger Award for excellence and accomplishment in research, clinical investigation, or scholarship in psychiatry: "Effects of *d*-Amphetamine and Pentobarbital Under Concurrent Fixed-Ratio Schedules."

**David W. Moskowitz.** Cum laude: "The Effect of Vitamin D Metabolites on the Bovine Parathyroid Gland."

**Jeffrey E. Sell.** Cum laude: "Chemical Antroneurolysis with and without Highly Selective Vagotomy."

**Charles F. Simmons, Jr.** Magna cum laude, and Harold Lamport Biomedical Research Prize for the best paper reporting original research in the biomedical sciences: "I. Renal Actions of Antidiuretic Hormone: Roles of Parathyroid Hormone and the Calcium Ion. II. Renal Cortical Mitochondrial Function in Gentamicin Nephrotoxicity."

**Peter G. Spitzer.** Cum laude: "Nonparametric Computer-Aided Diagnosis: Bahadur's Technique."

**Robert A. Star.** Cum laude:

"Acid-Base Physiology: Quantitative Models of Blood and Extracellular Fluid."

**Gustav K. von Schulthess.** Cum laude: "Angular Anisotropy Light Scattering: A Highly Sensitive Immunoassay Method."

**John D. Warbritton, III.** Cum laude, and the James Tolbert Shipley Prize for research, the results of which have been published or accepted for publication: "Physiological Consequences of Altered Serotonin Bioavailability in the Mammalian Central Nervous System: Behavioral Studies of Motor Responses in the Rat" (thesis) and "Decreased Locomotor Activity and Attenuation of Amphetamine Hyperactivity with Intraventricular Infusion of Serotonin in the Rat," *Brain Research* 143: 373-382, 1978.

**Judah Z. Weinberger.** Magna cum laude, and Leon Reznick Memorial Prize for excellence and accomplishment in research: "The Role of Idiotypes in the Suppressor T Cell Pathway."

**Kelley J. White.** Richard C. Cabot Prize for the best paper on medical education or medical history: "Suffer the Little Children: Trends in the Development of Societal and Medical Concern with Child Welfare."

**Robert A. Wolf.** Cum laude: "Biochemical Studies of Bovine Testicular Hyaluronidase in Dogs with

Coronary Artery Occlusion."

**Joanna K. Zawadzki.** Rose Seegal Prize for the best paper on the relation of the medical profession to the community: "GAH-BA-LEE-WAH: Alcohol in Zuni."

When the Class of 1980 took over the dais, they called up their best loved teachers and presented them with plaques of appreciation. **Arnold Weinberg '56**, professor of medicine at the MGH, and his colleague, **Roman DeSanctis '55**, professor of medicine there in the department of cardiology, accepted clinical teaching awards from **Linda Lyons**, editor of the 1980 *Aesculapiad*. The preclinical side was represented by two perennial favorites from the anatomy department, professor **Elio Raviola** and assistant professor **Daniel Goodenough**. **Sandra Skettino** did the honors for them.

**Chuck Simonton**, former president of the Student-Faculty Committee, congratulated deans **Dan Federman '53** and **Carola Eisenberg** for their involvement with the vicissitudes of HMS undergraduates; Dr. Federman was given a Japanese print, and Dr. Eisenberg, an onyx desk set. The class did manage to keep at least one of its awards a total secret. **Hilda Anderson** presented **Sue Foehrenbach**, administrative assistant in the student affairs office, with a plaque — much to her surprise — for helping "to make it all possible."

# Ode to the Class of 1980

by julia haller yeo

*It was September, Nineteen Seventy-Six  
When we hit HMS, and our feelings were mixed:*

*Uncertainty, worry, despair, shock, and terror,  
It was clear we'd slipped in on a clerical error.*

*We came with all sorts of backgrounds and knowledge,  
From East and West, but most from "The College."*

*Our spirits, we thought, could no more wilt,  
'Til we saw our rooms in Vanderbilt.*

*Now some folks like closets, and small rooms may be "sweet,"  
But try to eat, sleep, and study in five by five feet!*

*For food we must forage, it's Children's or subs —  
Longwood's not noted for cozy, quaint pubs.*

*Some fled to Brookline, downtown, or Cambridge,  
Far from thoughts of receptors, Baro, and Bainbridge.*

*Remember that party in the Faculty Room?  
Six glasses of sherry sure help dispel gloom.*

*We shook hands with Chieever, Ebert, McPhee,  
And first heard the dread words, "Hi, I'm HST."*

*Next off to advisors who for us selected  
Identical course loads from among our "electives."*

*Physiologists Barger, Kushmerick, and Beeuwkes  
Taught us structures and functions, from enzymes to mucus.*

*Hard to study physiology when the Sox have a man on?  
No problem — the answer's always "Walter B. Cannon."*

*Biochemical pathways with Kennedy and "Pop" Engel —  
We thought we'd never hang up our shingle.*

*Goodenough, Neutra, and Pollard were fun —  
You passed listo with a fifty-one.*

*And then there was neuro with Furshpan and Potter,  
We went to exams like lambs to the slaughter.*

*Relief! We passed! And vowed sincere,  
We'd learn those camels by heart — next year.*

*Embryology brought us Dr. Hay's cigars,  
Drove some to law and all to bars.*

*A chalet acquired for those who could or could not ski,  
Soon competed for time with the Brothers Karnovsky.*

*Micro with Weinberg, Davis, and Fraenkel:  
We cultured flora from earlobe to ankle.*

*Collecting excreta and plating it all,  
From bathroom to lab — right down the hall.*

*Neuroanatomy passed incomprehensibly,  
Three lectures a week, in English — ostensibly.*

*C<sup>2</sup>, C<sup>3</sup>, C<sup>4</sup>, C<sup>5</sup>,  
We learned to speak anatomical jive.*

*S<sup>1</sup>, S<sup>2</sup>, S<sup>3</sup>, S<sup>4</sup>,  
Elio kept us coming back for more.*

*And who can forget the well-earned rewards  
Of Amphitheater C's own Anatomy Awards?*

*One year down, gone in a whiz,  
In September it was time for pathophys.*

*In cardiac, deSanctis discussed the MI,  
Goldman, Isselbacher, and Silen fed us GI.*

*Musculoskeletal exams were thrillers:  
250-plus questions from Dr. Schiller.*

*Studying lungs, kidneys, and glands,  
Filled up our hours and faded our tans.*

*Post-Christmas vacation we met the New Year  
With the last pathophys course: Skin, Eye, and Ear.*

*Re skin, eye, and ear not much do we know;  
We had to rehearse for the second year show!*

*"Cadavers" and "Countaway" were show-stopping numbers,  
Skits-o-phrenia had it all, from dancing to tumblers.*

*If shows were mountains, ours would be Everest —  
Most music, most people, best scenery, cleverest.*

*Then Introduction to Clinical Medicine struck,  
And every patient in town was down on his luck.*

*Sparr's equipped us with white coats in our size,  
We crammed tongue blades down throats and otoscopes in eyes.*

*After two years of Harvard and the knowledge it affords,  
We all got nailed on the National Boards:*

*Two eight hour days without rest, hope, or love,  
Praying all answers were "E, none of the above."*





*Third year at last and well worth it all —  
Then we found out what they meant by "night call."*

*No fund of knowledge, confidence jettisoned,  
Remember that awful first day of medicine?*

*Your teammates are listed, they're smarter than you,  
You can't take a history, you're coming down with the flu,*

*You've got a meeting with Thibault and you've already missed it,  
And somehow they gave you an endocrine visit.*

*For some it came easy, for most it came tough;  
One night in the Brigham is more than enough.*

*Exhaustion, frustration, you want to know why?  
Try putting IVs in, on F-Main, in July.*

*The BI's halls we warily trod,  
Expecting . . . well . . . have you read House of God?*

*Now hospital talk is gossip and hype,  
And every field's always stereotyped:*

*"The fleas just talk, and round the day through —  
It's not their fault, it's all they can do."*

*"The blades don't think, just do post-op checks —  
Hot soaks, wet-to-dry's, and a course of Keflex."*

*"Pediatricians say 'ick' and throw soap,  
And sport stuffed bears on their stethoscopes."*

*"Eye docs are busy (though they can't treat a cough),  
OR in the morning, in the afternoon, golf."*

*"Neurons test for the lesion and  
Then get the real answer by CT scan."*

*"Psychiatrists labor all through the day,  
Trying to find patients more nuts than they."*

*"Derm is attractive, lucrative, simple —  
PUVAs for psoriasis, tetracycline for pimples."*

*Fourth year brought us internship cares,  
And we sought out special travel fares.*

*Interview time for the indigent sort  
Means you see a lot of Atlanta's airport.*

*"Dr. Prout, please make my Dean's letter shorter:  
Just leave out the part about my character disorder."*

*Juggling our match lists, what's number one?  
How to decide? More prestige or more sun?*

*March 12th at the match garbed in splendor sartorial,  
We tried to psyche up for Angell Memorial.*

*Eat, drink, and be merry, next month we're "on,"  
Four years of med school suddenly gone.*

*But HMS '80 was not through — the proof  
Was our production of Zebra on the Hoof.*

*All wit that can spring from the mind Homo sapiens  
Combined in our "best ever" show Aesculapian.*

*Despite our success, Broadway goodbye,  
Goodbye friends and family come 1st of July!*

*We scatter to programs here and abroad,  
Where all will expect us to pronounce it, "Hahvahd."*

*Four years went fast, but now as we leave,  
These verses perhaps some memories retrieve.*

*Now on to the future! And this wish have I:  
Good luck, good health, good lives! Goodbye.*



# Down on the Farm: the Plight of the Generalist

by thomas j. gates

In medical school, our day-to-day education remains largely unchanged — still dominated by the diseases, the technology, and the values of the tertiary care system. Pathophysiology teaches us about every disease known to man — except the common ones. In the clinical years, we learn that the “good student case” all too often involves a disease so unusual or bizarre that we are unlikely to see anything like it again. Searching for role models, we are taught the myth of the LMD, who supposedly torments interns and fills hospital beds with his mismanaged patients. Meanwhile, genuine role models are all too rare — especially in family medicine, which alone among all the specialties is unrepresented by house officers in any Harvard hospital.

Perhaps the most significant bias in our education is its complete neglect of continuity in patient care. Following patients through time, as their illnesses evolve, and as they present with new problems: this is both the challenge and the reward of primary care. Yet in the context of our one month rotations through each specialty, we never follow our discharged patients in the clinic; never follow a pregnancy from first trimester to post-partum check; never follow the evolving natural history of the chronic diseases so prevalent today.

What awaits future primary care practitioners when they complete training and enter practice? Some, no doubt, will have to fight the battle for hospital privileges. One suburban family practitioner has had to go to court to get obstetrical privileges in his hospital, despite having fulfilled training requirements during his residency. And one of the major Harvard teaching hospitals continues to deny full admitting privileges to the primary

care internists who work in that hospital's own affiliated health centers.

But the most significant incentives against primary care are to be found in the medical marketplace. Nowhere is the discrepancy between rhetoric and reality more apparent than in the third-party reimbursement system. Vested interest and bureaucratic inertia have combined to perpetuate a system that is irrational, wasteful, and counterproductive. Fragmented, technology-intensive medical care is rewarded, while the patient-oriented skills of the primary care physician are consistently undervalued.

For example, after an all-night vigil with a critically ill patient, a private practitioner will collect the standard third party fee of eight dollars. By contrast, he or she could receive three times this amount for the two minutes necessary to interpret an EKG, or ten times this for a routine fifteen minute endoscopy.

Likewise, a physician who makes a home visit to a chronically ill and housebound patient will receive fourteen dollars from Medicare. But if the same patient with the same disease is seen in the emergency room, the physician will be paid three times this amount. Of course, what is profitable for the doctor can be costly to society, with ambulance fees, emergency room charges, and expensive tests often adding up to two hundred dollars or more for one patient.

Needless to say, these financial facts of life have implications for relative incomes among the various specialties, implications that run counter to the national need for more primary care physicians. A recent study has shown that physicians in some procedure-oriented specialties

As American soldiers returned from Europe in 1918, the words of a popular song asked, “How you goin’ to keep them down on the farm, after they’ve seen Patee?” Today, American medicine faces a similar challenge. The great public need is for well-trained primary care physicians, yet after being exposed to the marvels of the modern medical center, too few students respond to this need. The facts are well known: accelerated medical progress leading to ever-increasing specialization; a precipitous decline in the number of general practitioners; and now, large numbers of rural and inner city Americans without access to quality medical care. On the national level, there is a growing recognition that we need a better balance between generalists and specialists. This is reflected in the phenomenal growth of family practice during the past decade, as well as renewed interest in primary care internal medicine and general pediatrics. But despite the rhetoric about new national priorities, in reality the system continues to discourage a career in any of the primary care specialties.





are routinely reimbursed at an hourly rate of up to five times that of the primary care practitioner, at a level far in excess of what can be reasonably justified by the specialist's extra training. In an era when many students leave medical school with debts of twenty or thirty thousand dollars, such incentives should not be discounted.

These issues are of obvious importance to the twenty-five members of the class who are choosing careers in family practice, primary care internal medicine, and general pediatrics. But does Harvard Medical School have any stake in the future of primary care?

Some would argue that Harvard should play no role in training primary care physicians; that Harvard's proper function is to produce only specialists and researchers; that a Harvard student choosing primary care is a wasted resource. Those who

take this position seem to be convinced that a credible primary care program would be contrary to the school's tradition of academic excellence, an invitation to mediocrity and anti-intellectualism. But this argument contains no recognition that common diseases can be worthy of our interest; that intellectual challenges can be as much a part of primary care as any other field; that clinical research at the primary care level can help solve problems that have a substantial impact on the public health. And finally, there is no recognition that an effective and humane health care system requires close cooperation between specialist and generalist. Instead of promoting such cooperation, our education leaves the specialist with little understanding of the generalist's task, and in turn deprives the generalist of ready access to the resources and knowledge of the specialist. If the recent growth of primary care is not merely to accen-

tuatate these divisions, then there must be a major effort to integrate a primary care perspective into Harvard's traditional specialty-oriented education.

Harvard justifiably takes pride in its position of academic leadership, but it is wrong to use this as an excuse for neglecting family medicine and the other primary care specialties. These fields represent an exciting new frontier in medicine, where the challenge is to integrate our tremendous scientific knowledge with new ways of delivering humane health care to all our citizens. As an institution dedicated to the highest educational ideals, Harvard has a stake in the future of primary care. For if our task is to serve the public need, this is an area of great need. If our task is to advance knowledge, this area cries out for innovative research. And if Harvard's task is to train future leaders, this field, no less than any other, is in need of such leaders. □

# A Challenge to Minorities in Medicine

by pamela a. chevers



Throughout history minority groups have been underrepresented in all aspects of the medical profession. Explanations, ranging from inadequate applicant pools and high attrition rates to lack of aptitude for science and mathematics, have been offered to account for the paucity of minorities among the ranks of physicians. Because of this gap it is believed that minorities have had little success in medicine and have not participated in its long and exciting history. For too long we have been made to feel that members of minority groups have made few, if any, contributions to the evolution of American medicine. Modern accounts of the history of medicine deprive minorities of the knowledge of their contributions to medicine by ignoring or subtly misrepresenting the ethnicity of the contributors.

The contributions of minorities to the art of medicine began in 2980 B.C. with the African Imhotep, a scholar, architect, statesman, and physician in Pharaoh's court. According to the noted physician Sir William Osler, Imhotep was "the first figure of a physician to stand out clearly from the mists of antiquity." Medical historians generally recognize the importance of Imhotep but conveniently make no mention of his race. Instead, the original practice of medicine is most often attributed to the Greeks.

Even as caucasians journeyed to the Americas, they found the art of healing being practiced by the ancestors of Chicanos, Boriquas, and Native Americans. Here medicine was ceremonial in nature and an integral part of religion. For the most part, the foreigners were repelled by the superstitious rites that often accompanied native procedures and shrank from the notion that an "uncivilized"

race might have something of value to teach them. Thus ethnic arrogance hindered any serious acknowledgment of the medical knowledge that these so-called savages possessed. Yet the natives' wide knowledge of medicinal herbs and physical manipulations led to the introduction of heat treatments, purgatives, cauterization, bone splinting, sutures, poultices, and over two hundred drugs, including curare, and other drugs that controlled the menstrual cycle and pointed researchers to the road that led to the discovery of the "pill."

In more recent history some of the more notable contributions of minorities include the development of a flocculation test for the determination of syphilis by Dr. William Augustus Hinton, the discovery of a technique to preserve blood for transfusion purposes by Dr. Charles R. Drew, and the establishment of numerous health care facilities by minority physicians to provide medical services to the disadvantaged.

Although I have only presented highlights it is apparent that minorities have made significant contributions to the profession. It is probable that an interest in medicine among minority youth would increase if the contributions of minorities to the history of medicine were more widely known. There is little doubt that correction of minority underrepresentation in medicine will require affirmative action programs at the high school, college, and graduate school levels. Therefore, the challenge before

minorities as we take our places as physicians is threefold — to be strong advocates of affirmative action programs designed to channel more minority youths into medicine; to promote recognition of the achievements of minorities in medicine and advocate their inclusion in general education; and finally, to carry on the legacy of those who have preceded us by continuing to make our presence felt in medical science and health care delivery. In rising to meet this challenge perhaps we can inspire more minority youth to qualify themselves for entry into the profession. □

## Choice Words

"Have some primary care," the March Hare said in an engaging tone.

Alice looked all around the medical school, but there was nothing on the table but tea. "I don't see any," she remarked. (This was four years ago, mind you.)

"There isn't any," said the March Hare, "but you just wait until the Class of 1980 goes out to fill that gap."

And so I expect you will; at least, most of you. But where you will find it is another matter. Some may find it in a busy clinic, others in a crowded emergency room, and still others perhaps in the small hours of the morning in an intensive care unit when it is really just you and the patient. Wherever you do find it, be it





Nearly four years ago, the newly arrived Class of 1980 sat in amphitheater C listening to orientation speeches. Under the watchful eye of Walter B. Cannon, we patiently lent our ears to welcoming addresses from various deans and members of the faculty and administration. They spoke for the better part of the afternoon, but all talks focused on a single theme: the glories of Harvard and our future here. We heard about all the "firsts" which have come out of Harvard, all the wonderful achievements and brilliant discoveries. They then assured us that we would fit in quite well, because we were special — set apart by virtue of the fact that we were chosen to be at Harvard.

East Puddleby, the Tertiary General Hospital, or perhaps overseas, you will find (as Kipling has put it), "It seems to be required of you that you must save others. It is nowhere laid down that you need save yourselves."

Four times, a year ago, I looked down a long table on a Monday morning in the Hurlbut Room, and met about a third of your class. For many it was your first real "clinical rotation," and the atmosphere ranged from cultivated sophistication to frank anxiety. I think many of you wondered about the product I was trying to sell — the Joy of Surgery. I like to think that after two months of finding your way about the wards, rendering very primary care in the back room of the

All this attention was very impressive. We sat there, a little stunned, almost believing all the good things that were said about us. At the same time it was a little intimidating. Were we really all that talented? Could we live up to such expectations?

Along the road to today's celebration, living up to expectations has not always been easy or satisfying. Nor has it always coincided with our goals. Throughout our tenure at Harvard we have often been reminded of our potential — how we are meant to be leaders; to rise to the top of our profession. It was stressed that success is gained through research and involvement in academic pursuits.

As a result, many people who do not feel dedicated to research have felt left out of the mainstream. They feel rejected from that group designated so likely to succeed because they have re-

jected what they see as the Harvard ideal. Feelings of enthusiasm have often been replaced by feelings of pressure and resentment.

My words today are directed at those who don't feel a part of that "Harvard ideal." I'd like to remind them that historically the Harvard ideal includes much more than research with a capital "R."

When this university was founded in 1636, its purpose was to give an excellent education and encourage clear thought. Men and women educated at Harvard have traditionally been known as talented, well-rounded people who make their own individual marks on society. There is, despite jokes to the contrary, no "typical" Harvard man or woman. And the medical and dental schools are no exception. Our class has proved to be a group of varied individuals, with unique talents and abilities equal to those of any class. It would be a pity if we were all to turn out the same.

And yet, I don't think the faculties of our schools mean to turn out armies of automatons, devoting all our energy to research and deluging the NIH with grant applications. Rather, I think they mean to encourage that which research stands for: an open and inquiring mind, dedication to a field of study, and a desire to make a difference. It is as important for physicians and dentists involved in patient care to possess these characteristics as it is for those involved in pure research.

We were chosen to be part of the Class of 1980 because we were judged to possess the qualities I have mentioned. Now it is up to us to make the best use of our special individual talents in the way right for us. It is up to us not to lose our individuality but to go out and make a difference. To me, that is the Harvard ideal. □

J. GORDON SCANNELL  
*Editor's note: Dr. Scannell originally composed these reflections for the Class of 1980's Yearbook, but when they reached the editors the book had already gone to press. Because it seemed a shame to deprive the class of his thoughts, we have included them here.*

# Integrating the Harvard Ideal

by leslie a. will

# A Degree of Difficulty

by lewis r. first

The medical degree. Congratulations! Today we have earned it. Degrees however are funny things. You can have thirty-two Fahrenheit degrees and yet that would rate a big zero on the Celsius scale. What is our degree worth? Don't answer that just yet, because that will largely depend on our patients who, let's face it, are the true appraisers of the value of our medical degree. Moreover while we've been immersed in four years of a formal medical education, rumor has it that most of the general population has been obtaining an informal one. In fact I hear that even though our patients-to-be have not done much regimented studying in pathophysiology or even presented a case in visit rounds, they have nonetheless developed a rather extensive medical vocabulary in which words and phrases like "malpractice," "second opinion," and the "heartbreak of psoriasis" are a dime a dozen.

Who's responsible for this? Who is educating the patient today? While it would be nice to say the patient's doctor serves as the primary teacher, this just isn't the case anymore. Oh yes, doctors serve as teachers, but more often than not, this means Marcus Welby, Hawkeye Pierce, Trapper John, M.D., or any of the host of fictional medical faculty practicing on television who so expertly devote themselves to the care and healing of that unique one patient per week. Who are these TV doctors kidding? We all know seeing one patient per week is both impractical and impossible. Perhaps two . . . but one — no way! Yet as long as there is a working television set in this country, some patients will continue to expect that kind of exclusive "prime-time" treatment from us.

Over the past few years, networks have been making a much more conscientious effort to program medical documentaries and public health information programs, but unless peo-

ple can be as entertained watching these as they are watching a situation comedy, these medical shows will never be biggies in the ratings.

There are also other ways that the patient currently receives a medical education. There are our illustrious newspapers, eager to reveal the most sensationalistic medical discoveries, sometimes even before we as a medical community have had a chance to methodically prove their effectiveness on a clinical basis. If a new mode of treatment is to be recommended by a patient's physician, odds are good that the patient will be more agreeable to try such a treatment if he has seen it first in something like the *National Enquirer* — which is rapidly becoming the patient's *New England Journal*.

Books also serve to educate: the self-help books, those designed to let the patient be his or her own doctor, and those that try to teach the patient how to deal with illness. Some of these books, based on fact, such as the recently published *Heart Sounds*, by Martha Wineman Lear, are valuable tools, but too many others like *The House of God*, by Samuel Shem, are based predominantly on stereotypical fiction. These latter can only do more harm than good.

So there you have it, a brief survey of the patient's curriculum, designed to challenge the physician's authority, but taught by everyone and everything but the patient's physician.

Fortunately the present curriculum is a flexible one and changes can be made. These are changes for the better that we, beginning today, can institute, and we won't need our orders co-signed.

Perhaps the most important contribution we can make involves communication. If you think I'm going to restress the importance of talking to, and not over, under, around, or through the patient, you're right. There is no excuse for us to hide behind a wall of complex medical terminology when we don't know an answer to a patient's question — or even when we do. For example, telling a patient that his alopecia should be temporary will result in his losing even more hair worrying what the word means. Other patients may be itching to know what the word pruritis means; our failure to tell them may be contributing to their symptoms.

As a group it is time for us to provide as much information to the public as we can — and not just the new discoveries, but the practical and preventive side as well. For example, having seen the fourth year show and the talent our class possesses, it would be nice if we had an hour of prime-time television each week so we could sing and dance our way through everything from venereal disease to the common cold, hence educating while entertaining the patient. But it's just





# Is There a Doctor in the House?

by judah folkman



not practical. Besides we would probably have to preempt an episode of "Trapper John, M.D.," and none of us would want to miss that, especially if it's the episode where he reinflates a lung using a portable car vacuum cleaner — one of my personal favorites. We can however make a conscious effort to become actively involved in the medical education of the general public both with our patients on an individual basis or in front of larger groups when the opportunity presents itself. I think our four years at this venerable institution have equipped and obligated us to do that.

The public demands a medical education, and if we as practitioners don't give it to them, someone or something else will. I can't claim this thought as original; Sir William Osler said in his 1895 address on "Teaching and Thinking": "Our mission is of the highest and of the noblest kind — not alone in curing disease but in educating the people in the laws of health, and in preventing the spread of plagues and pestilences."

No one says it will be easy to assume the role as the patient's principal medical educator. In fact I would say it will take some degree of difficulty. But that difficult degree we have earned today, and with it we can begin to provide the type of medical education the patient requires to appraise realistically and maybe even appreciate the health care system. □

*In 1965 Judah Folkman '57 completed his postgraduate training as chief resident in surgery at the Massachusetts General Hospital. Two years later he was named Julia Dyckman Andrus Professor of Pediatric Surgery — at age 34, one of the youngest full professors in this history of the Harvard Medical School. Then, a year after that, he became surgeon in chief at the Children's Hospital Medical Center, a position he held until this September, when he stepped down in order to devote himself more fully to patient care and research. Such professional recognition, however, provides only some of the more tangible reasons why this year, for the third time, he was selected by the graduating class to deliver their Class Day address.*

**Y**ou have already heard many words of wisdom. What could I possibly say of personal value as you embark upon your journey through the teaching hospital as a new intern or resident?

You are fortunate to be entering the very best hospitals. You will be taught a myriad of new skills by the finest consultants and specialists, with the most modern equipment. At weekly conferences you will learn from your mistakes that good clinical judgment comes from having made bad judgments. You will be busy, sometimes too busy, with many patients, sometimes too many. From all of this, your clinical self-confidence will be fashioned.

In fact, everything you need to apply your medical school education to your future clinical work will now be taught to you, *except for one essential.*

This essential is the most difficult thing to teach in a teaching hospital — *how to be a doctor.*

It must now cross your mind that I have lost mine. "What is he talking about? As soon as the speeches are over and they award the M.D. degrees, then I will be a doctor."

I was just as naive until a few years ago. One day while making



rounds I came upon a young mother, weeping by the bed of her four year old daughter. Two weeks before we had removed an abdominal tumor and we were grateful that there was more than a ninety-five percent chance of complete cure. The child was receiving the chemotherapy and radiotherapy that would guarantee this cure.

I asked, "Is Melissa in pain?"

"No."

"You know how pleased we are with her progress?"

"Yes."

"Then, why the tears?"

She said, "We are here all alone, my daughter and I. We don't have a doctor."

I was stunned. I said, "But, you have me and my residents as your surgeons, and also the oncologists,



and the radiotherapists and their residents; a whole team taking care of Melissa."

From her purse she pulled a little sheet of paper with questions she had written. She said, "Yesterday the blood count was very low and the nurse said I should ask the hematologist. Today the X-ray treatment was postponed, and I was told to ask the radiotherapist."

I asked, what about the resident assigned to this floor? "Oh, he is rotating to another service tomorrow, and is busy writing off-service notes. The new resident doesn't know Melissa."

On the back of the list she had made a diagram of who could be asked which question, who was on which night; a veritable road map of her daughter's many doctors. This pathetic piece of paper offered a message that I hope you won't forget. She felt abandoned, without a doctor, in a hospital crowded with doctors.

At first I thought, well, this is a singular problem of patients with cancer. Oncology is multidisciplinary; it uses the team approach. I soon re-

alized that on every service, in almost every teaching hospital, there are many patients baffled as to which doctor is responsible for them, and fearful that perhaps no one is.

The idea that for each patient one doctor should have constant responsibility seems self-evident. Yet, its actual practice is confounded by almost every tradition established in our modern medical centers: residents rotate; visits visit; attendings attend (usually for one month of the year); consultants consult, and leave a note that says, "I will follow with you." The patient's family doctor who referred him to the medical center usually cannot take care of him there. Even if the referring doctor is a member of the hospital's full-time staff, he often finds himself in conflict with interns and residents when he wants to write orders on his own patient. The residents feel he is usurping their prerogative.

Every doctor is hard to reach because the ward secretary may say, "We don't want to disturb him," or the hospital telephone operator may

say, "Sorry, we cannot give out his number."

One of my odd experiences as a resident was when my wife and I moved to a new apartment. The phone was installed while I was on duty for a long weekend. My wife called the hospital to give them our new number. Late that night when I called the hospital operator to find out my own number, she wouldn't give it out. When I finally got home, two days later, my wife said, "Why didn't you call?"

Is that any more ludicrous than when at grand rounds we boast, "The patient refused to go home until it was okay with his doctor, the third year medical student." This is a nice compliment to the medical student, but what does it say about the hospital system?

What is this yearning by patients for "my doctor?" This desire, so deeply embedded in everyone, that a third year medical student will be adopted if no one else is available?

Let me suggest to you at least three kinds of yearnings I find again and again in my patients.

For some patients there is a yearning to be guided through the maze of consultants and conflicting opinions, not by a team, or a tumor board, but by one responsible person. Dr. Franz Ingelfinger, the former editor of the *New England Journal of Medicine*, who recently passed away, said publicly that when his own cancer of the esophagus was diagnosed he was, at the time, the world's expert on that disease. "No patient could be more fully informed," he said. Yet, different advice came to him from all over the country, from leading surgeons, radiotherapists, and chemotherapists. He became confused and distressed about which therapy to choose, until one of his colleagues said, "Franz, what you need is a doctor."

Ingelfinger said that a great sense of relief descended upon him as soon



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as he entrusted himself to one doctor, who could sort out the advice, make the decisions, take the responsibility, and share the worry. Above all, one who could create a sense of order in the face of frightening circumstances.

For other patients there is a yearning to develop with their doctor a special, and not always spoken, language; a history of shared experience, a genuine respect for one another; in short, a relationship.

This wish for someone dependable, a sort of fixed reference point in the midst of daily chaos, is well understood in fields outside of medicine — for example, by the television networks. Reuven Frank, former president of NBC News, said in a recent article in the *New York Times* that the biggest mistake of his career was to put his three best anchormen, David Brinkley, John Chancellor, and Frank McGee, on a rotating dusty roster. This meant that on any given day, two would appear.

The audience hated it. Angry letters poured in. People were never sure who would be on. The rotating roster had to be scrapped, and that is why John Chancellor emerged. Millions of Americans have come to know by his face, not just by his words, that what he says is reliable.

A doctor who develops an insight into the labyrinth of his patient's ways can tell from a fleeting facial expression when something is wrong. It is a signal, as fragile and yet as informative as radioastronomy, that alerts the patient's doctor, but makes no sense at all to the transient consultant.

Finally, for other patients, there is a yearning for explanations about what is happening to them. There is a yearning to be educated about their illness by their physician (physician means "teacher"). For these patients, understanding is like a transfusion; with it they can begin to convert their



adversity to strength. Compare the remarkable recovery of the woman with breast cancer whose surgeon, day by day, month by month, explains, cajoles, persuades, and then makes a compliment on her progress. Compare her with the woman whose surgeon fades out as soon as the stitches come out.

The administrators of our great teaching hospitals are vaguely aware of these yearnings. Aware that many patients are dissatisfied, aware that the current flurry of lawsuits is symptomatic of something other than an epidemic of negligence. They respond in their own way with a patient's bill of rights, or an ombudsman, or a committee of patient advocates. This is one problem we cannot blame on hospital administrators. It is not their fault. It is ours, and by us I mean mostly department chairmen or service chiefs

like myself, along with our staffs.

Do we intentionally design our teaching services so that patients can be so easily abandoned? No! The traditions that make these hospitals the best place to learn in, and the safest place for the very sick, generate an unintended consequence, a disagreeable side-effect: many patients feel deserted.

I am not suggesting that we discard these traditions, any more than we would discard a life-saving drug because of a side-effect. Instead I ask, is there a way for us to treat the side-effects of our teaching and technology, so that you need not go all through your training without learning the essentials of being a doctor? So that you need not be overwhelmed by the system?

Let me conclude by revealing just a few of the simple secrets by which



you can improve the system:

1) For elderly patients, for example, try taping your name to the other side of their wrist band.

2) For certain patients, try giving them your telephone number. In pediatric practice, *nothing* is more comforting to a parent than to have their doctor's phone number. It is a privilege rarely abused.

3) If your patient is transferred to another service, check on him or her for a while afterwards. The worst disasters and the biggest lawsuits result from transfer of responsibility.

4) Don't be misled by the assumption of new house staff that bloody shoes and dirty uniforms will make you look experienced. Nonsense. A clean, neat uniform says that you are a professional and that you take your responsibility seriously. What would you think if you boarded a 747 and the captain showed up unshaven and without a tie?

5) Avoid harsh words to nurses, lest they become afraid to call you until it may be too late. When I was an

intern, I reduced a nurse to tears because of an intravenous that had run dry. The next day I was called into the office of the chief of surgery, and as I stood before Dr. Churchill's desk, he was quietly reading the complaint against me by the nursing department. Then he looked up and said, "Folksman, someday you could possibly become a professor. Why don't you grow up and start acting like one now?"

6) If your visit or attending prefers to teach in the role of the consultant, "at the foot of the bed," then you ought to become the patient's doctor. Try asking yourself, how would I want my own father or mother treated? Wouldn't they at least want to see "their" doctor come in daily, chart in hand, to review the happenings of the past twenty-four hours and to explain what will happen tomorrow? (Perhaps even do a brief repeat physical, when necessary, to be sure that the working diagnosis is still working.)

7) Most important, when the visit or attending prefers to be a "side-of-the-bed" doctor, don't deprive your-

self of a rare opportunity to learn.

Watch how he or she does it. I have observed that the residents who mature the most rapidly are flexible. On occasion, they can gracefully shift from writing all the orders, to the role of apprentice.

How will you know that you are succeeding? It will be when your patient begins to recover and introduces you to his family and says to them, "I want you to meet 'my doctor.'"

What if you fail? If you fail, then I think the future of our teaching hospitals may, in fact, be jeopardized. If in the coming years our academic medical centers are to survive, it will not be because of their CAT scanners or their transplantation units, or because of their abundance of specialists. (It is predicted that in the next ten years, all graduates will acquire specialty boards.)

In the next decade, if our teaching centers are still thriving, it will only be because we were willing to assure that for every patient, there was a *doctor in the house*. □



# Health for All by the Year 2000

by patricia roberts harris

*Patricia Roberts Harris, originally United States Secretary of Housing and Urban Development, emerged from the 1979 Carter cabinet shuffle as Secretary of the new Department of Health and Human Services. Such versatility reflects a broad educational and professional background which includes an AB, summa cum laude, from Howard University, a JD with honors from George Washington University Law School, and positions as professor and dean of the Howard University Law School and ambassador to Luxembourg.*

Every school child learns of the primacy of Massachusetts: it is the place where the Mayflower's passengers ended their journey and began the American experiments in self-determination. No matter that a year before Englishmen had come ashore at Jamestown. Virginia may have been the birthplace of Jefferson, Madison, and Monroe, but the pilgrim symbol belongs to Massachusetts. That they landed at Plymouth Rock and not Cambridge was simply reflective of the fact that admission standards had not yet been set and Harvard could not open its doors too soon, even to the founding fathers and mothers. But Harvard did arrive in Cambridge and it and Massachusetts have grown together. For more than three hundred years this university has been producing some of the nation's most distinguished scientists, philosophers, educators, and authors — and on occasion even a president or two.

Under those circumstances, it is not difficult to understand why the Harvard perspective has certain peculiarities, one of which Justice Oliver Wendell Holmes, the son of a Harvard physician, commented on after he was appointed to the Supreme Court. "It takes me several days after I get back to Boston," he wrote, "to realize that the reference to 'The President' refers to the president of Harvard and not to a minor official in Washington."

As an even more minor Washington official, I am pleased to be here as you close an important and demanding chapter in your lives. You have survived the maledictions of the curriculum committee, and, as a reward, you will now be permitted to move up to the status of an intern. I know you look forward to the long days and nights and days . . . the pressure, the exhaustion, the hard work.

The practice of medicine has changed radically in this century. In fact, it has changed radically in your lifetime, and if some medical students I have talked to are right, it changes radically between the second and third years. Medical practice has changed most dramatically in the areas of access and cost. A leaflet issued by Massachusetts General Hospital in 1900 illustrates how things used to be:

"The Massachusetts General Hospital is a private institution, supported solely by voluntary contributions and the receipts from those patients who pay board. Contagious diseases are not admitted to the hospital . . . Regular



charges to paying patients are as follows: in the private ward, \$35 a week; in the small rooms in the general ward, \$10.50 a week. The outpatient department is for the poor only and is open between 9 and 10 in the morning, Sundays and holidays excepted."

Today's Mass. General would never claim to be wholly private, and would not so restrict admission or outpatient responsibilities. Of the change in costs, these figures speak for themselves: a private room, \$220 a day; semi-private, \$198 a day — and those are not the highest hospital rates in the Boston area.

Access and the cost of medical care, not just quality or curative techniques, are the issues that you and all others concerned with medicine must deal with today. Those issues were widely discussed just a few weeks ago, when I led the United States delegation to the thirty-third annual session of the World Health Assembly, the principal governing body of the World Health Organization. Two events at the meeting in Geneva were of particular significance.



The first was the official declaration of the eradication of smallpox. No naturally occurring case of smallpox has been identified or treated in the last two years, testimony to the ability of medicine to address a major health problem on a worldwide scale through research and treatment. The second was the affirmation of the goal, "Health for all by the year 2000." If the eradication of smallpox demonstrates how far we have come in improving health, the goal of health for all by the year 2000 is a reminder of how far we have yet to go. It was an act of world faith, hope, and commitment that led to the adoption of this goal of health for all in less than twenty years.

**W**e in this country have seen great improvement in the health of the American people in relatively few years. The success of efforts by the government of the United States is demonstrated by:

- Nearly fifty percent reduction of infant mortality in the last fifteen years;
- Increase in life expectancy of more than two years since 1970;
- Dramatic decline in the incidence of childhood infections such as measles, mumps, and rubella, and virtual disappearance of polio;
- Twenty-two percent reduction in cardiovascular mortality and thirty-three percent reduction in the incidence of stroke.

But despite our expenditures, fifty million people in this country live in areas with severe shortages of health personnel and, as a consequence, many of their substantial health needs are unmet. Thirty-seven million Americans have either inadequate health insurance or none at all. These geographic and financial burdens are heaviest for the poor, the elderly, and the disadvantaged. The elderly spend more out of pocket for health care services today than before the enactment of Medicare. Medicaid covers only fifty-two percent of the nation's poor as a result of various limitations in eligibility in the state run programs.

As the result of this grossly uneven distribution of health care, various groups suffer great deprivation. Black Americans are one such group that is subject, for example, to an infant mortality rate that is twice that for whites. Black males between the ages of twenty-five and forty-four have a mortality rate more than double that of whites in the same age category. And a black male can anticipate living eight fewer years than his white counterpart.

These are some of the unmet health needs in the United States as we move to achieve health for all by the year 2000. But difficult as our problems are, let us contemplate the plight faced by developing countries who have also committed themselves to the same goal. Last winter I visited Nigeria and next month the health minister of that country will visit the United States to ascertain whether we

have approaches to health care that will be useful as Nigeria seeks to change the following health statistics:

- An infant mortality rate of 157 for every 1000 live births;
- Life expectancy of 48 years;
- 80% of the population without access to potable water;
- Pre-school death rate of 24%, more than twice that in the U.S.;
- One physician for 14,810 persons, as compared to a U.S. ratio of one physician for every 562 persons;
- One dentist for 42,600 persons, as compared to a U.S. ratio of one dentist for every 1970 persons.

Although Nigeria is the most populous and one of the more prosperous sub-Saharan African countries, it has a per capita GNP of \$420, as compared to \$8,520 in the United States. Health care costs are rising for rich and poor countries alike. But while escalating costs are significant for us, for developing nations the choice is not between a CAT scanner and less costly equipment, but whether to use limited funds for medicine, to build a road, to build more schools, or to send more students to Lagos or Washington to secure a medical education. As one who has seen roads become impassable mud streams in the rainy season, I would expect that in the short term roads will win, because they mean produce can move out to markets and medical supplies and personnel can move into a formerly unreachable area.

When I see the agonizing choices that must be made by my counterparts in the rest of the world, I sometimes feel ashamed of our failure to deal with problems that are within our control. Rising health care costs are a case in point. From 1968 to 1978, expenditures for these services rose at an average annual rate of twelve percent — more





than twice the rate of inflation in the general economy. And if current trends continue, health care costs will soon constitute more than ten percent of our projected GNP. Much of the money spent has resulted in more and better health care. However, an unacceptable amount of this increasing expense represents a failure to provide the most efficient delivery of health care services.

The failure to conduct our health care system efficiently constitutes a danger to our ability to provide health for all by the year 2000. In my opinion, the major impediment to the speedy adoption of national health insurance is the assumption that the rising costs of health care are inexorable, and that therefore the best way to control expenditures is to limit coverage and access. We see a manifestation of this concern in the efforts of individual states to put upper limits on the already limited coverage by Medicaid, and suggestions that both Medicaid and Medicare beneficiaries bear ever greater portions of the cost of their medical care.

You will play a major role in determining how the issue of medical costs will be resolved. Seventy percent of all health care decisions are made by physicians, and other health care professionals also play an important role. Both for your own future, and for the future of those who have need of improved health care, I urge your consistent and careful attention to how the medical profession can achieve lower costs, wider service, and efficient delivery systems.

But I do not wish to mislead you about my position. The government's role in improving access to medical care and in controlling costs is here to stay, and it is a question of when, not whether; of how, not whether, we shall have government supported universal health insurance in this country. It may take two months, it may take two years; it

may, heaven forbid, take two decades, but it will come. It may come in pieces, it may come all at once, but full health insurance will come, and in our lifetime.

In addition to my concern for our health care system is my hope to provide a transferable model for developing states. I believe that unless our system can do so, we may leave developing countries no alternative but to adopt totalitarianism. Nice phrases such as "health care is a basic human right" have no inherent meaning unless we can demonstrate ways in which to provide for the health needs of a society at all stages of its development.

When the Nigerian health minister visits next month, we will tell him what we have seen of the promise of reduced reliance on high cost technology, of an emphasis on primary care and prevention, of the increased use of medical personnel in teams and the increased use of cost efficient prepaid medical plans as opposed to reliance on fee for service arrangements. But we will do so with a sense that we are still swimming upstream, our only hope being that at the end of our journey we will have been as successful in spawning new attitudes about the necessity of controlling costs as the exhausted salmon are in spawning their next generation.

Another observation I will share with the Nigerian health minister and the other health ministers who will visit the United States this year is that they can expect change in the nature of health care problems at different stages of social and economic development.

At the beginning of this century infectious diseases were the major cause of death in the U.S. With improved public health measures and the advent of effective vaccines



and antibiotic therapy, infectious disease has been reduced and today, seventy-five percent of all deaths in the U.S. are due to degenerative diseases such as heart disease, cancer, and stroke. Accidents rank as the most frequent cause of death from age one through the early forties. Many of these accidents are the result of the abuse of alcohol.

Among black young people, homicide is the leading cause of death. Smokers suffer higher rates of cancer, heart disease, and other related problems. In women, breast cancer will soon hold second place as a cause of death since women smokers have put lung cancer into the race for first. Environmental, behavioral, and social factors now play an increasingly important role in shaping not only how Americans live, but also how they die.

It is clear that lifestyles associated with rapid economic development, urbanization, and affluence bring ills with which we must learn to deal. The last one hundred years have seen a veritable explosion of diagnostic and curative techniques, and we will continue to improve our ability to identify and cure the illnesses that still plague all people. But for developed nations in particular, and for the world at large, the promise of the future lies not in the curative arts, but in prevention. In this country we must undertake a national effort at prevention targeted against the most significant causes of death and disability in our society: heart disease, cancer, stroke, and accidents.

Developing societies have a similar interest in prevention. From immunization to lifestyle changes, developing and developed nations are at almost the same point in the acceptance of prevention as a major health policy goal. Here we come together in our concern to prevent, so that we will not need to cure. The late Dr. John Knowles perceived this need for change when he wrote, some years ago: "Medicine has changed . . . it is now a social science and a social service as much as it is a highly individualistic service and (it demands) a new concept and a new philosophy." Part of that new concept and new philosophy requires helping patients avoid illness and exporting that concern beyond the boundaries of our own nation state.

The potential for world cooperation through a commitment to prevention cannot be overemphasized. As a result of an international agreement on this common goal we can continue and enhance the already spectacular international cooperation in the transfer of medical knowledge, technologies, and medicines. I can foresee, and indeed hope for, the development of an international health service corps, a cadre of prevention-oriented medical personnel, capable of responding to health needs in any part of the world. Once we talked in the international forum about a multilateral defense force for military purposes. I would hope that one day we would see the establishment of a formal multilateral health force. We have seen its forerun-

ner in the men and women from so many nations who led the smallpox eradication drive. We see its vanguard in the World Health Assembly staff members working with AID personnel and Peace Corps workers around the globe.

If the reports of our success in training enough medical personnel in the U.S. to meet domestic health needs are accurate, we will have more than an adequate supply of personnel to share with the rest of the world. It is not too early to consider both whether and how we should utilize that surplus. There will, of course, be problems of funding and leadership of such an international effort, but if we work together as nations concerned about the welfare of all of our peoples, such cooperation in health can be institutionalized and become a front line of defense against the degradation of human life.

**I**n a time of universal retrenchment and of a new and necessary focus on defense via increased military preparedness, I would not expect immediate adoption of the suggestion of a formal international life defense force. But as new health professionals, I urge you to consider the possibility of becoming involved in this kind of effort. Eleven of you will join the United States equivalent of such a life defense force, the National Health Service Corps. For that decision I commend you. You will serve in Indian Health Service hospitals, urban ghettos, and Appalachia. You will provide an example of how a dedicated corps of professionals can change the health climate, even though they may not stay for a lifetime in one place.

When medicine and democracy were both in their infancy, Aristotle said: "If we believe men have any personal rights at all as human beings, they have an absolute right to such a measure of good health as society is able to give them." You will note that Aristotle did not say physicians or government, but society. And society is all of us, throughout the world, working in cooperation to guarantee the greatest measure of health we can to everyone.

It is my hope, as you leave Harvard to embark on your medical careers, that you will consider how we can close the health care gap between the haves and the have nots of this world. As we build a system that offers quality care to all the people of this nation, we also have a responsibility to find ways to achieve justice throughout the world. The world is ready to work with us. The real question is whether we are ready to work with the rest of the world to solve together our common health problems. I believe we are. You can be part of the process that makes it clear to the people of the United States and then to the rest of the world that in the field of health we have indeed become one world. I congratulate you upon your commencement; I salute you upon your opportunity to participate in bringing health to all by the year 2000. □



# Valediction

by dean daniel c. tosteson



Welcome now to the end of your medical school years, to an ending that is also a beginning, the beginning of your lives as physicians. It is a moment of joy, the joy of accomplishment, a joy made poignant by the sweet sorrow of parting from places, friends, and perhaps even a few enemies that you have come to know during the past four years. Share with me for a few minutes some reflections of the past and the future, on constancy and change, on learning and service, and on pride and humility.

The Harvard Medical School brings together the past and the future. When they conceived the shapes that were created here seventy-five years ago, the designers of these marble palaces looked back toward an earlier age. Use has worn the inner halls, the functions and equipment in the rooms have changed with the times — for some toward renewal as in the neurobiology laboratories and for others toward decay, as those of you who suffered in the dissecting rooms will recall. But the majestic, massive forms of the

buildings of this Quadrangle have become a part of every person who has studied at HMS during this century. More than these stone structures, it is the unbroken chain of human beings that binds old to new in Harvard medicine. The presence here today of Dr. Ebert, who served as dean between 1977 and 1965 and of Dr. Berry who preceded him between 1965 and 1950 makes the point more eloquently than my words. I enjoy the company of them and their predecessors when I am in the Benjamin Waterhouse Room and see the portraits of Sidney Burwell, David Edsall, Henry Christian, and the others, back through Oliver Wendell Holmes to John Warren. Feeling their presence among us makes our past live. Being 198, and almost at our 200th birthday in 1982, really doesn't seem so strange. But the Harvard Medical School faces not only the past but also, through you, the future. You will be in the midst of your most productive years in 2005 when you return for your twenty-fifth reunion. What will the practice of medicine be like then?

The simplest and most honest answer to this (and most other) questions is, "I don't know." Predicting is a difficult and uncertain art. Most professional planners admit that more than five years into the future is eternity. However, to show that I am getting used to being a dean, I will address the impossible.

I believe that we are in the early stages of a profound transformation of medicine, a transformation based on continued discoveries about human biology. In 2005, you will recognize the human organism as more complex, more subtle, and more dynamic than we now imagine. Medicine will become more, not less, based on technology through an increased understanding of the molecular and biological basis of disease. Diagnostic procedures will become less invasive and harmful and more sensitive, specific, and continuous rather than episodic. Preventive and therapeutic strategies will make greater use of the genetic potentiality for self-generation and self-repair. These changes will have profound effects on how you and your patients and, indeed, all people think and live.

We differ from our forebears less in individual capability than in what we have learned. Information communicated from generation to generation in words rather than directly in DNA determines social evolution and history. Each individual person needs a sense of identity that can inform a steady course in the midst of the confusion of discovery. One important social structure that provides such continuity, constancy, and stability is the institution of learning, the university. This is a place where scholars work together, helping one another to sustain the hard mental effort required to overcome ignorance. In this sense the Harvard Medical School is a place where individuals gather to help one another learn in medicine. I hope that your exper-

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iences in this company of scholars have been and will be a source of stability for you in your changing professional lives, and that they will sustain your commitment to learning.

For learn you must if you are to use wisely and effectively the tools of the new medicine. When you stop learning, you will stop being a good doctor. I was talking with one of our alumni in New Orleans earlier this week about what he most treasured in his legacy from HMS. He said the joy of solving medical problems. He sees each patient as unique — diagnosis as discovery. Learning is discovery, not just learning in the laboratory, but also at the bedside, not just when no one else knows but also when you are finding out for the first time. Basic and applied research, and teaching are not separate and mutually exclusive but rather different facets of a single stone, learning. Learning in medicine is unlike other kinds of learning because it is directed not only toward relieving ignorance but, primarily, toward helping the sick and the suffering. Meeting this solemn responsibility provides the deepest satisfactions, the harshest frustrations, and the greatest temptations to physicians.

I will speak of just one such temptation, pride. You have already seen the extent of the power that your knowledge gives you in the lives of the patients. They need, often with a feeling of desperation, what you know. Be proud of the fruits of your learning, your growing wisdom in the practice of medicine. But always be alert to the limits of your knowledge. Be humble before the vast complexity of each unique person seeking your help. Acknowledge that most of what we are and learn reflects the minds of others. With humility, help and let yourselves be helped by your colleagues and your patients.

Go, then, and learn to care for the sick. Through caring for the sick, learn. Most of all, care enough to continue to learn and to serve those who seek your help. Sometimes that will be easy, but sometimes it will be very difficult. For those hard moments, I wish you courage, the kind of courage captured by William Carlos Williams, himself a physician, in his short poem entitled "El Hombre":

It is a strange courage  
You give me  
Ancient star  
Shine alone in the sunrise  
Toward which you lend  
No part





## 1914

Life as a nonagenarian, according to **Harry C. Solomon**, means continued travel both in this country and abroad with his wife Maida and sojourns between their homes in Jamaica Plain, Massachusetts and Maine. Much of their time is spent visiting and being visited by their family — twenty-nine strong.

## 1919

**Stuart Adler** is quite content at Leisure World in Laguna Hills, California. "There is little time for leisure," he muses. "Lawn bowling, gardening, Harvard Club Medical Society, lectures, concerts, and socializing fill our days. All this amidst delightful surroundings, marvelous weather, nearby ocean beaches, and snowcapped mountains as background. Happily married and enjoying very good health. What more could I ask?"

**Joseph P. Derby's** 87th birthday on May 12 was a family affair, enhanced by the presence of his four children and eight grandchildren. Dr. Derby and his wife Alberta are living in Heritage Hall in Agawam, Massachusetts. Dr. Derby says that he misses his work and hopes "the true traditions of medical practice are properly upheld by our new graduates."

## 1921

"After a bout with prostatic surgery, B. Pyocyaneus septicemia last fall, and many varied antibiotics," writes **Randolph K. Byers**, "I'm still alive, but handicapped by loss of position sense, congestive heart failure, and mild angina. I've given up my office at Children's Hospital in Boston and am at home in Milton, where my wife cares for my simple needs with great aplomb." **Allen W. Locke** states that he is in "reasonably good health. Still read medical journals but even some of the titles I find difficult to comprehend."

## 1923

In retrospect, **Daniel N. Barber** says that his "forced retirement in 1974 came just in time. I could not participate in the impersonal, exorbitant practice of medicine of today. I wish the *Alumni Bulletin* would re-

print the essay, 'The Human Factor,' written by Dr. Charles Hoffman of West Virginia — a past president of the AMA — and published in the March number of the *West Virginia State Medical Journal*. I believe it should be a part of every medical student's study."

## 1924

"Progress notes are not my forte," professes **W. Sterling Clark**, "but this is how it is. Am still practicing orthopedics three days a week and expect to continue until the end. Gave up surgery several years ago so life is not too demanding. Am still golfing and my goal is to shoot 90 when I'm 90. It could still be a goal, although I recently shot my age at 80. Best wishes to all who are still hanging in."

Our sympathies to **Merrill S. Greene**, whose wife of fifty-three years died in her sleep on March 3, 1980. Dr. Greene writes that he is still active and was awarded a Colby Buck on May 30.

**Harry O. Veach** has his sights clearly set on returning to HMS in 1984 for his sixtieth reunion. The "doctors of medicine" in Rochester, Minnesota, where he has been living for over three years, say he is in "fair shape for age 82. I was there for the fiftieth

anniversary of my class and distributed a medical paper to the alumni in 1974. I am not practicing now, but may have another ready for distribution by '84." Dr. Veach plans to combine his HMS visit with a jaunt to Cambridge where a son and grandson both live and where, Dr. Veach adds, he himself was enrolled in the Harvard Graduate School in 1921.

## 1925

**Richard S. Buker** and his wife have been on rounds visiting their three sons. Christmas was spent at Fort Sam Houston, where their son Robert is a colonel. In June they visited Richard, also a colonel, and Gerald, a medical director, both of whom live in Chester, Montana.

Having been retired for three years, **Philip J. Howard** has shaken the dust from some of his medical school memories. "The first year in anatomy, **Raynor, Smithwich, and Howard** dissected a forlorn and helpless but still, for our purposes, complete specimen. The fourth member of our dissecting team withdrew after the first examination. It was a foretaste of glory that the three of us persevered."

**Harold F. Morrill** informs us that he has had Parkinson's Disease for the past fifteen years and it is gradually getting worse. He has cataracts in both eyes as well, one of which has been operated on.

Retirement seems to be in name only for **Howard A. Patterson**, who is "a rather active consultant at two hospitals" in the New York City area. His older son is chief of the trauma service at Roosevelt Hospital.

## 1926

The overseers of Howard University have reappointed **Claude E. Forkner** as a member of their committee to visit the Center for Middle East Studies. Dr. Forkner is also in the process of reestablishing his relationship with former colleagues and students in the People's Republic of China, after a lapse of forty years. He was associate professor of medicine from 1932 to 1936 at the Peking Union Medical College and served for two years as director and professor of medicine at the China Medical School of Rockefeller University.

**Clark W. Heath** is looking for a publisher to reprint a book written by his mother, Mary Hubbard Heath, in 1929, about his uncle, *The Ellbert Hubbard I Knew*. "In 1914 Hubbard published an essay, 'Who Lifted the Lid Off of Hell?' and for his pains was tor-

## 55th Reunion

There was a very meager attendance of members of the Class of 1925 on Alumni Day to celebrate our fifty-fifth year out of medical school.

**Maurice Pike** and **Jim Baty** were the only ones at the exercises and luncheon in the Quadrangle, and we did not find each other to have our picture taken with the reuniting classes.

In the evening, a few of us gathered in the Lincoln Room at the Harvard Club and enjoyed a very good dinner. **Cob Palmer** and his wife **Edith** from Brookline were there as well as **Stew and Lyn Clifford** and **Jim and Jo Baty**, all from Duxbury. **Maurice Pike** and his companion from Farmington, Connecticut completed the group. We spent most of our time reminiscing about our classmates and our own activities and offspring. Befitting the age of most of us, we disbanded at a relatively early hour.

JAMES BATY



pedoed on the Lusitania in 1915. He also wrote a famous essay, 'The Message to Garcia,' which at the time was read by more people than read the Bible (but not as good reading as the Bible). His mottoes continue to be published, one of which is 'Let's see! Let's see! What is it they pursue in Boston? Culture! That's it! In East Aurora we don't have to pursue culture. She feels at home with us!'"

**Everett D. Kiefer** retired from practice in 1977, after the death of his wife Elsie. He now lives in Meredith, New Hampshire on the shore of Lake Winnepesaukee. "This is beautiful country and I have many friends here. During the past winter I spent two months visiting my two daughters in Europe."

**George V. Smith** has immersed himself in completing his autobiography, "knowing that the time is coming when obituaries of me will be written; I wanted to ease the task for whomever's duty it will be." Dr. Smith also has had his hands full preparing an article to be considered for publication in *Cancer*. Entitled "Malignant Diseases in Women. Treatments and Results: 1929-1979," it covers 770 private patients, each one followed to death or to date, May 1980. "I performed my last operating room surgery in December 1977, but office practice has continued. Up to thirty women a week come to me for care, viz. comprehensive histories and examinations, indicated laboratory tests, and prescriptions. Minor surgery is performed — desiccation or excision of skin lesions, aspiration of masses in breasts, cortisone into ganglia, biopsies of lesions of vulva, vagina, and cervix, curettage of uterine cavity, removal of blood clots from hemorrhoids, as well as desiccation of same." And ever-concerned about his alma mater, Dr. Smith wishes that HMS would get "that wonderful Alan Alda to address alumni and students as he did at Columbia last year."

## 1927

**Herbert L. Elias** "feels good in spite of a myocardial insufficiency two years ago. I am still practicing pediatrics, but with much smaller and more comfortable practice."

**Harold J. Freedman** has reached yet another paternal milestone: "Finally a great-grandfather! Granddaughter Laurie Sobol decided I need more practical experience as a pediatrician — and so she presented me with Nicole."

**A. Fletcher Hall** and his wife credit their continuing good health to the sporting life — she swings a tennis racket and he a golf club ("sort of").

In the case of **Robert S. Herzog**, retirement — at the end of 1979 — has proved so full "with a variety of personal matters and hobbies that I marvel that I was ever able to see patients! Am still considerably concerned with medical climatology. Health is more or less adequate, though not perfect. May I vote against aging? It is not quite all it is cracked up to be."

For **Chester M. Kurtz**, retirement in Albuquerque is an on-again, off-again proposition, every three to four months. "Each time I am called back to fill in for members of our hospital staff who are away on vacation or ill. It pleases me to still feel needed and wanted at age 80 — quite flattering, in fact. Aside from a few minor ailments, including diabetes, abdominal aneurysm, gall stones, and two coronaries (I wear a pacemaker), I enjoy good health and manage to keep out of the hospital and nursing homes (as a patient). Make a habit of walking one to two miles at least once a day, which keeps the blood pressure normal without medication. Before starting this regimen, it was consistently elevated and required diuretics daily."

**Albert J. Sullivan** is realistic, not resigned: "I look and feel about 80 — but am enjoying life!"

## 1928

His practice is limited these days to office patients and consultations — and that, **Carl J. DePrizio** reports, is just "to keep me off the street."

In May 1980, **Joseph C. Read** and his wife moved from Atlanta to Danville, Kentucky, to be near their oldest daughter and her family.

**Leon J. Saul** can certainly be known by the books he writes. In 1979 he published *The Childhood Emotional Pattern in Marriage* and *The Childhood Emotional Pattern and Maturity*. Subsequently, this year he has published: *The Childhood Emotional Pattern and Psychodynamic Therapy* and *The Childhood Emotional Pattern and Human Hostility*. (All have been published by Van Nostrand Reinhold.) Dr. Saul is dean of the Philadelphia Academy of Psychoanalysis.

## 1929

"It seems hardly possible that I am among those beginning their sixth decade of alumnihood," exclaims **Edward Parnall**. "I still do 'orthopedic evaluations' for whatever lawyers, third parties, or individuals may desire. This small activity keeps me on my toes a bit and lends a little spice to the day's routine. The emolument involved is not exactly impressive, but is nevertheless gratefully received! Those juvenile delinquents (two of them) who thought their father worked too hard, and therefore shunned the altar of Apollo the Physician, persisted in their delinquency, and now one is a professor of law and the other (recently graduated) is slugging it out as a 'public defender' (and both of them have discovered that they have to work like hell, just the same). The oldest of the three, my daughter, found that an AB in English does not help her family's exchequer much, so she became one of the few who have made an RN a graduate degree."

**Albert Quintiliani's** son, Albert, Jr., left

Seattle last year and is now the dermatologist for Ross-Loos Medical Group in Orange, California. Further family news is that Dr. Quintiliani's granddaughter just graduated from Pomona College.

Upon remarrying on January 5, 1980, **John S. Rhodes** moved back to town, Raleigh, North Carolina, from his country abode. He recently saw **Tom Dixon**, who was en route from Florida to his home in Maine.

## 1930

**Arthur N. Berry** and his wife are "card-carrying grandparents. Our oldest granddaughter graduated from the University of Georgia in political science. Another graduated from Vanderbilt in psychology and will be teaching math at Andover Academy in Massachusetts. A third granddaughter has finished her second year at the University of Georgia. Our oldest grandson is in business in Atlanta and still single. No great-grandchildren are in prospect because no one is seriously considering marriage. Other grands are still in high school."

## 1931

**John R. Parish** was awarded a Doctor of Science degree by Grinnell College in May 1979.

## 1932

By this time, **Rex S. Campbell** should be enjoying the fruits of great-grandfatherhood — in addition to the ongoing joys of retirement, family, and grandchildren in California.

**Robert L. Garrard** is still practicing part time "and slowing down. More time for gardening."

**James S. Mansfield** and wife Sally spent three weeks on a Massachusetts Audubon Society-sponsored birding tour to Portugal and Spain in May and June.

**George H. Marcy** and his wife crossed the country in late spring to visit their daughter Polly and son-in-law Richard K. Spaulding in Tacoma, Washington. A family practitioner, Dr. Spaulding had just opened his own office there after having been a member of a group practice. The Marcys' other daughter, Patty Richards, is moving to Buffalo — where her parents live — since her husband has been made professor of engineering at SUNY, Buffalo.

## 1933

**George B. Beaman** writes: "Spirits are top hole even though blind in one eye and can't see out of the other at the moment. One





## 50th Reunion

Fifty-three classmates and thirty-eight wives registered for the fiftieth reunion. The following were present: Abrams, Aird, Andrews, Anglem, Babson, Banks, Berry, Blacklow, Caughey, Clarke, Collins, Decker, Franseen, Freeman, Gause, Graney, Halsted, Hamilton, Hazard, Hertig, Hodgman, Paul and Franklin Hugenberg, Johnson, Kendall, King, Kranes, Leahey, Ludwig, Montgomery, Morrison, Nevius, Newell, Patek, Pearson, Peters, Pilcher, Reynolds, Shambaugh, Spence, Storms, Stratford, Strayer, Vernaglia, Wallwork, Wayburn, Wheeler, Wood, Woodall, Zealy, and Zielinski.

Special thanks are due the reunion committee: Babson, Banks, Hamilton, Hugenberg, Kendall, Ludwig, Pilcher, and Wallwork for their work in making the necessary arrangements.

The reunion banquet was held at the old Harvard Club. The guest speaker was John H. Finley, professor emeritus of classics at Harvard. On the following day luncheon at The Country Club was a most pleasant termination of the reunion festivities. The excellent attendance attests to the persisting friendship and loyalty of the class members to Harvard Medical School.

ALFRED LUDWIG

advantage: if dirt and dust can't be seen, there isn't any. I go to church in my gardens sometimes — to the devil at others — if you know what I mean!"

**Marshall L. Carter** "received a first granddaughter (also first redhead) in my seventieth year. (Have three grandsons, the oldest thirteen!) Just survived first coronary at seventy-two, with help of a younger HMS graduate possessing same common sense we exhibited in our day! Best regards to all of you."

**J. Engelbert Dunphy** has been awarded at every turn. From the Senate of the State of California he received a citation for outstanding contributions to the university, the state, and the community of San Francisco. From his home base, the University of California, San Francisco, he received its highest honor — the University Medal — for contributions to surgical education. More than twenty-five of the residents and research fellows once under his tutelage now hold professorships in the U.S., Australia, Ireland, and Great Britain. Dr. Dunphy has also been on the lecture circuit. He delivered the first Samuel Koenitz Lecture

at Down State Medical Center, the William Reinhoff Lecture at Johns Hopkins, and the Schumacher Lecture of the Indiana Chapter of the American College of Surgeons — all in April.

**James R. Hamilton** notes "health fair, traveling (no gun), spent winter since retirement in San Diego. Soon leaving for Miami and then upper New York State, but doubt I'll stay there for cold winter."

"Between fishing for blues and king mackerel at New Smyrna's lovely ocean beach, I kibbitz weekly at the tumor conference at Halifax Hospital, Daytona Beach," reports **Kenneth B. Olson**. "I work for the National Cancer Institute when they want me and have recently visited medical schools in Baltimore, Hershey, Pennsylvania, and Raleigh, North Carolina (Duke). I had a short but nice visit with Dr. Eugene Stead at Duke and we recalled the Brigham in the thirties when he was an intern and I a student."

All's well with **John P. Trommald**: "Retirement wonderful — four children happily married with mother and father doing nicely — forty-sixth year of matrimony —

hope to make our fiftieth and also fiftieth 1933 class reunion."

## 1934

Another pro-retirement vote comes from **Chester B. Allen**, who nevertheless misses "the fun and excitement of medical problems. I am glad that the Medicare forms, insurance reports, arguments with Medicare, and many more stumbling blocks in the way of good medical care are over. Doing some fly fishing, tying some flies, and planted a big garden . . . 'Come up and see me some time.'"

After nine years away from orthopedic surgery, **A.M. Okelberry** isn't anxious to return — but he does attend enough grand rounds to keep his state license.

**John J. Hopkins** writes: "The eighties will start a decade of reunions for many of us. For me, I celebrated my fiftieth reunion from Stanford University. There were many get-togethers, including a dinner dance and induction into the fifty year club. Now it will be looking forward to fifty years out of Harvard Medical School."

**Roger S. Mitchell** is still doing some part-time work. He received the Trudeau Medal for 1980 from the American Lung Association/American Thoracic Society.

**Harvey R. Morrison** also underwent fiftieth reunion festivities this year — at Yale. Other than that, he writes, "we keep busy in St. Johnsbury (Vermont — there is only one town of this name in the world). Our highways are clean (bottle bill), our signs are according to strict codes, and we conserve energy the way the rest of the country ought to."

On June 6, 1980 the Washington Hospital Center presented the Gold Headed Cane Award to **Lawrence E. Putnam** "for his contributions to the field of internal medicine." The citation noted that "he has earned the esteem, respect, and admiration of his peers and therefore becomes a symbol of medical excellence."

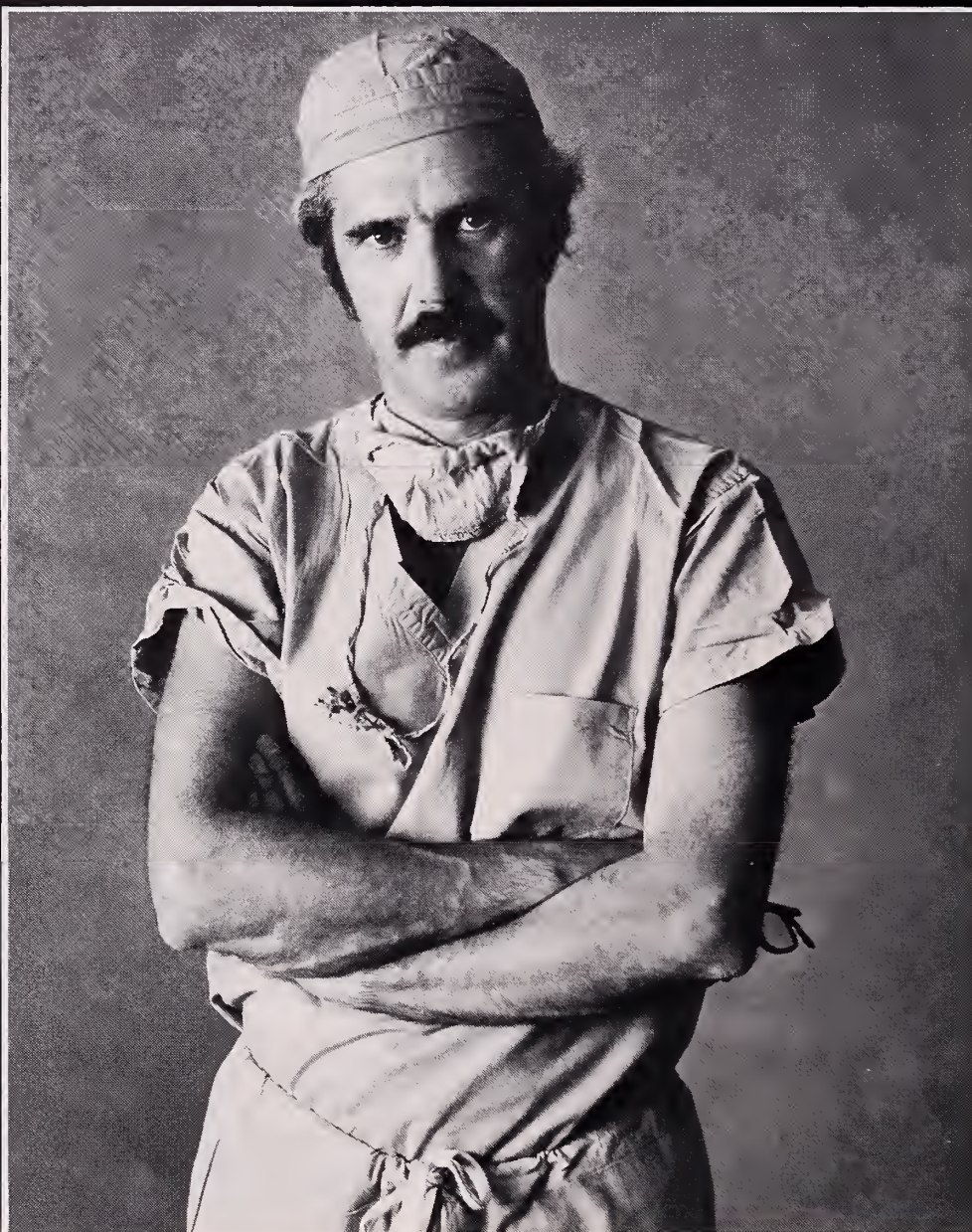
**Robert E. S. Young** treated his family of three children and their children — "eight healthy, beautiful, intelligent grandchildren, thoroughly spoiled by their grandfather" — to a vacation in Florida. Dr. Young closed practice in 1977 after his first MI. His circumflex closed in January, and "fortunately there was enough collateral that no infarct occurred. My building business is stopped dead for the present. The farms are doing well and are a joy. I have just decided not to drill another oil well since the excise tax — so-called windfall profits tax — will make it unprofitable. Sad how many like decisions are being made. I find business interesting and much less stressful than surgery."

## 1936

**Arthur Baldwin** is still keeping himself fit with his work in the MRFIT (Multiple Risk



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